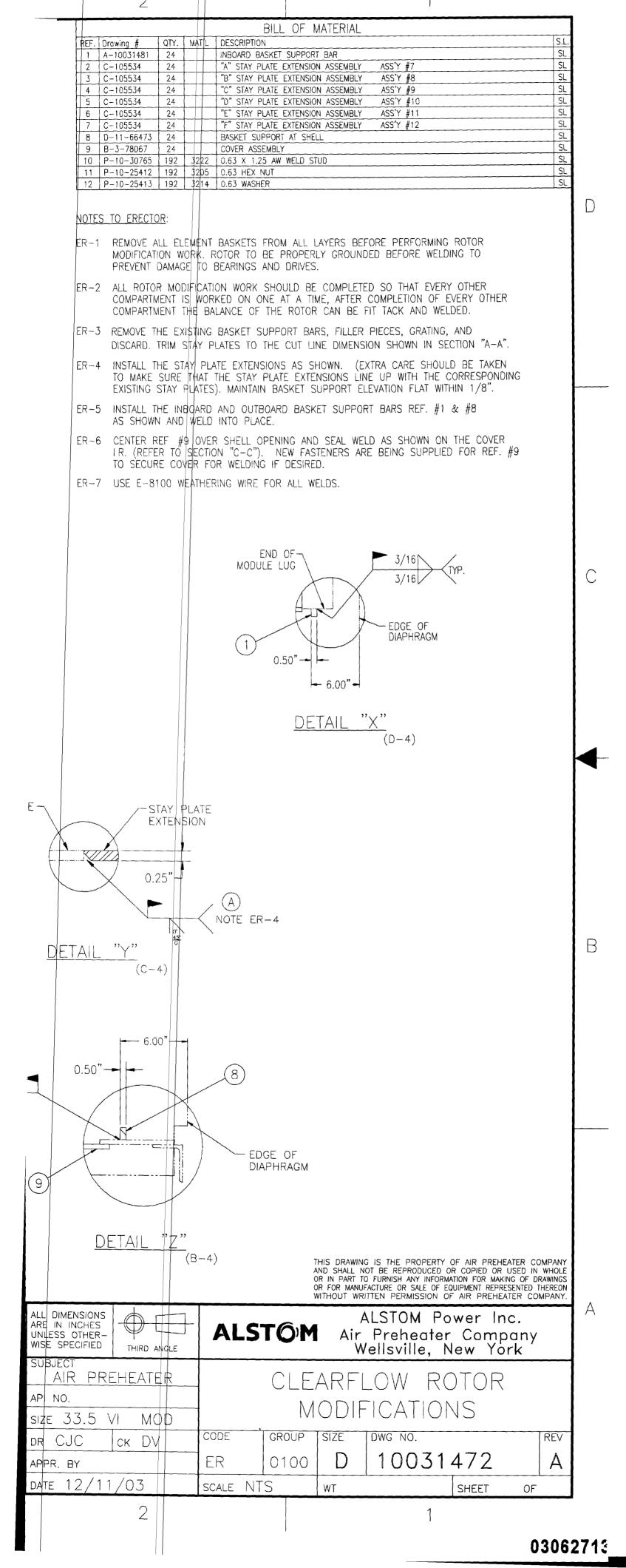
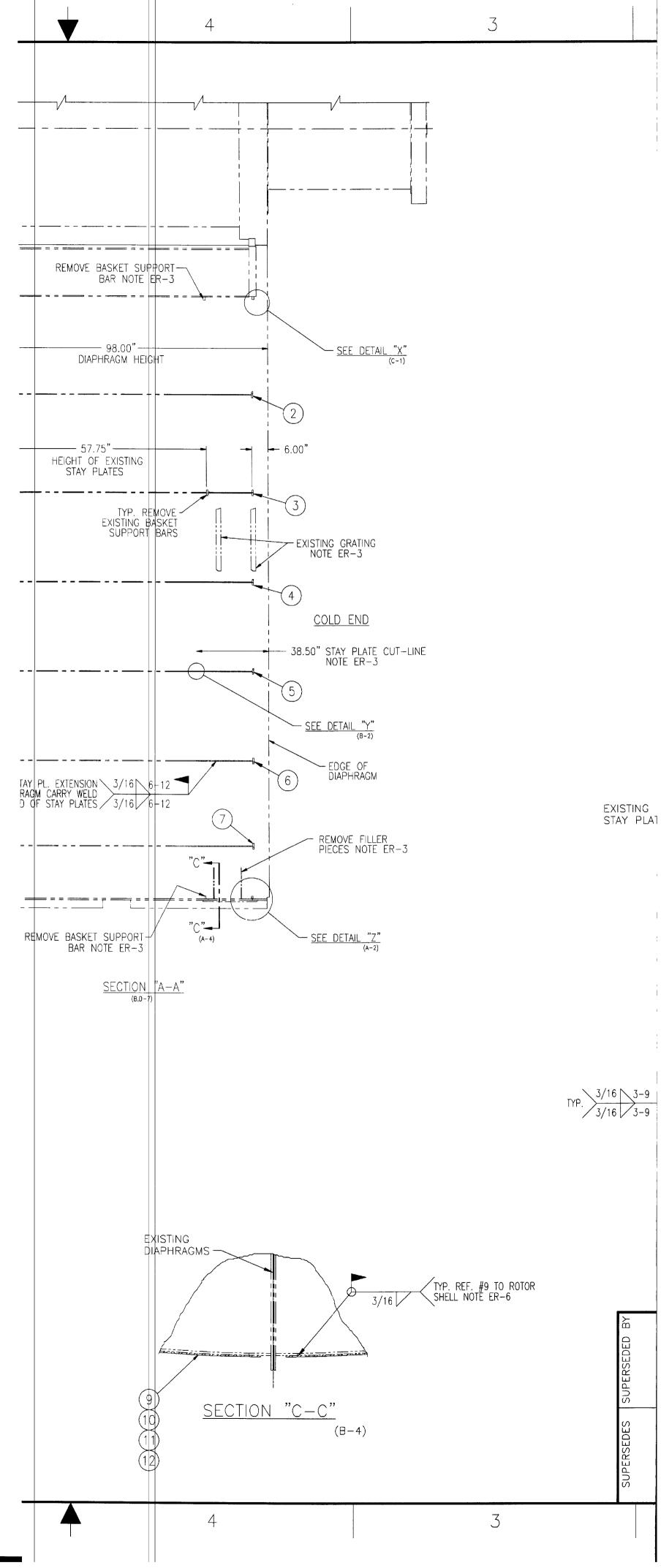
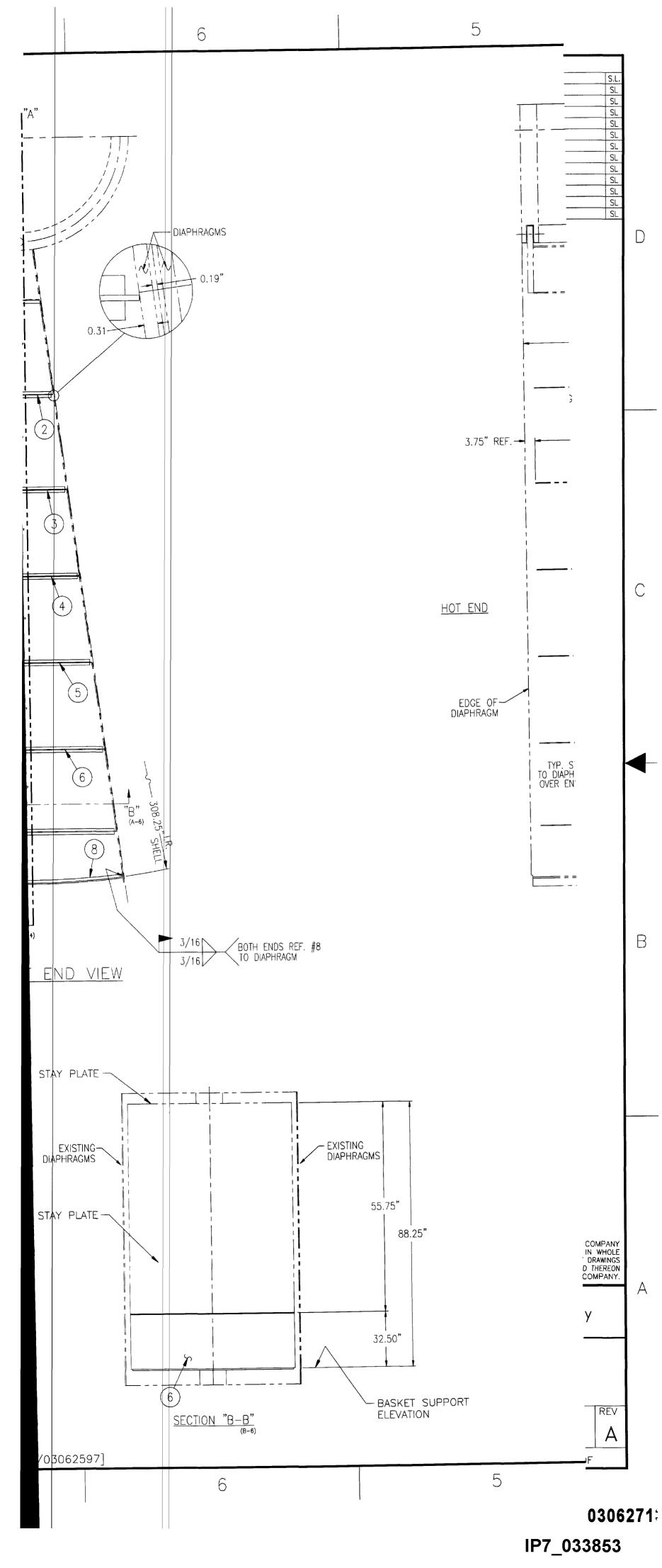
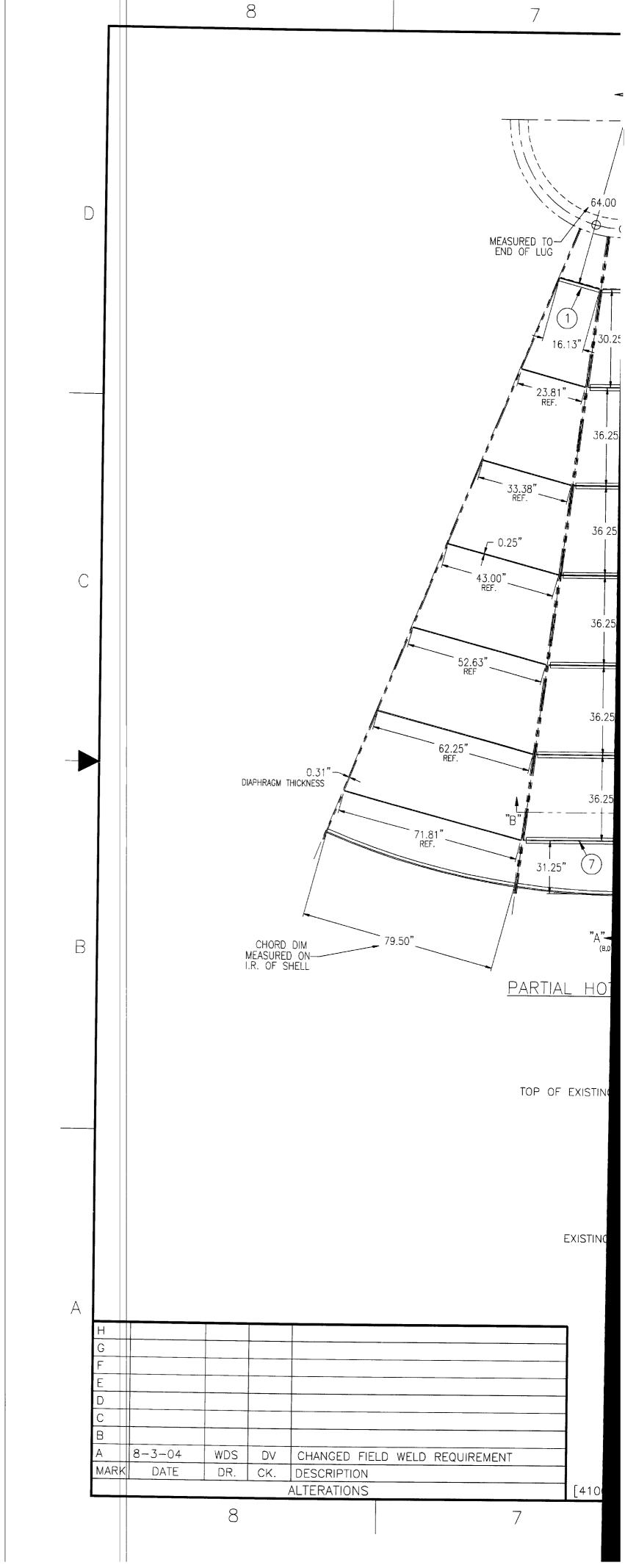
DRAWING PACKAGE 2005

IP7_033850









(#11) S	S.L. SL
(#11) S	SL
Y #5) S	
	CL
	SL
_G. :	SL
•	SL
	G.

NOTES TO ERECTOR.

- ER-1 ORILL FOUR HOLES THRU THE HOT CENTER SECTIONS
- ER-2 DRILL AND TAP HOLES INTO SECTOR PLATES AS SHOWN IN SECTION "A-A"
- ER-3 CENTER REF #3 ON #4 & WELD AS SHOWN, THEN CENTER THE ASSEMBLY
 OF REF. #3 & #4 OVER HOLE IN CENTER SECTION AND WELD TO TUB PLATE AS
 SHOWN IN SECTION "A-A"
- ER-4 ASSEMBLY REF \pm 1, \pm 7, \pm 6, \pm 8, \pm 11, \pm 12 AS SHOWN IN SECTIONS "A-A", MAKING SURE REF \pm 1 IS WITHIN 0.13" OF THE SEALING SURFACE
- $\mbox{ER-5}$ $\mbox{ AFTER FINAL SETTING OF SECTOR PLATE TIGHTEN REF $$ $\#12$ AND TACKWELD.}$
- ER-6 INSERT REF #10 INTO REF #7, ADJUST 1/4 TURN AT EACH REVOLUTION OF ROTOR UNTIL ROUNDED END JUST TOUCHES THE RADIAL SEALS
 ER-7 REMOVE REF #10 USE REF #9 TO CAP THE TUBE AND INSTALL THE
- COVER REF. #5 USING REF. #13 & #14

 ER-8 CHECK SEAL CLEARANCE USING REF #2 RESPECTIVELY TO DETERMINE THE ACTUAL SEAL SETTINGS

3/16

TACKWELD

1/4

CENTER SECTION

TUB PLATE

3 & 7

- SECTOR PLATE

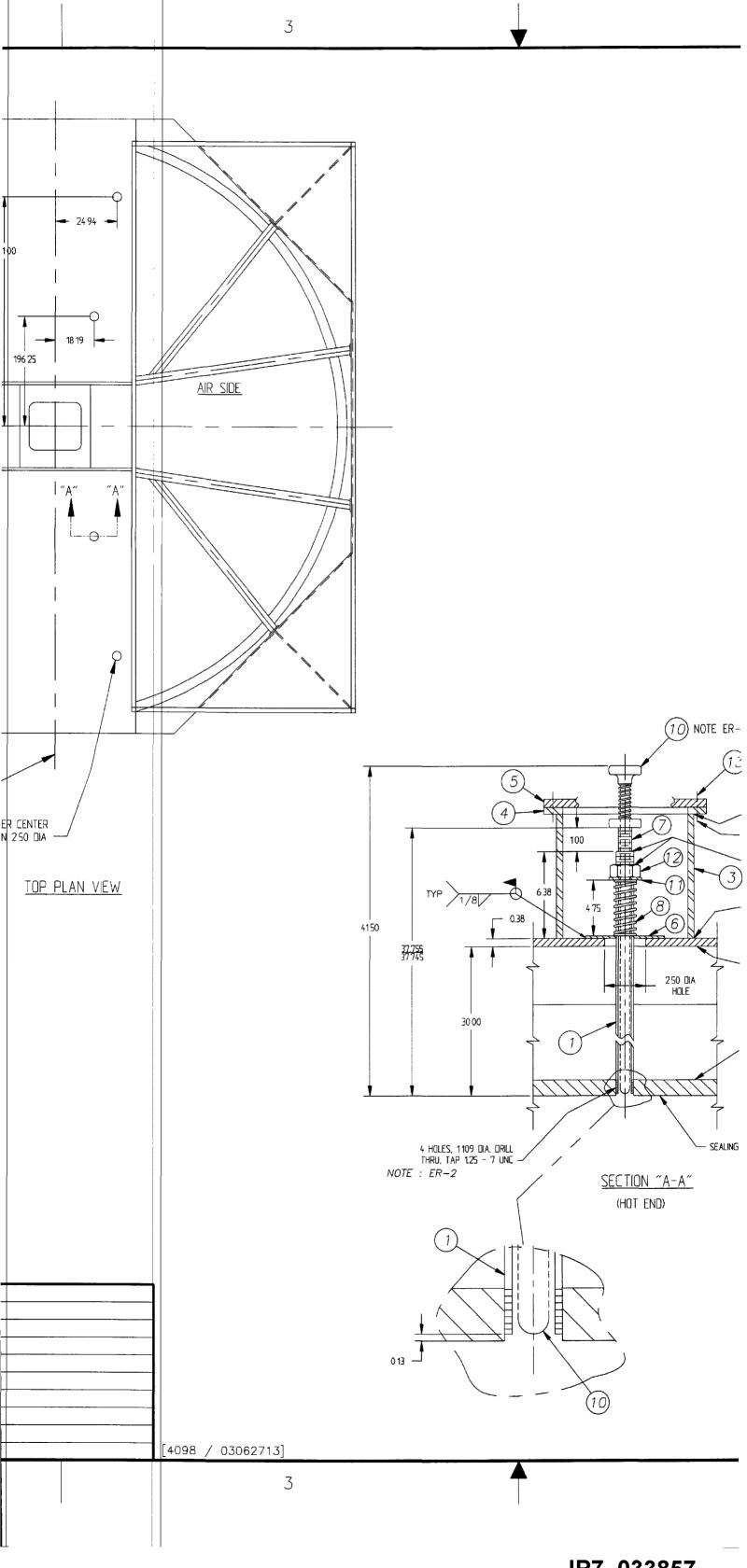
SURFACE

THIS DRAWING IS THE PROPERTY OF AIR PREHEATER COMPANY AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART TO FURNISH ANY INFORMATION FOR MAKING OF DRAWINGS OR FOR MANUFACTURE OR SALE OF EQUIPMENT REPRESENTED THEREON WITHOUT WRITTEN PERMISSION OF AIR PREHEATER COMPANY.

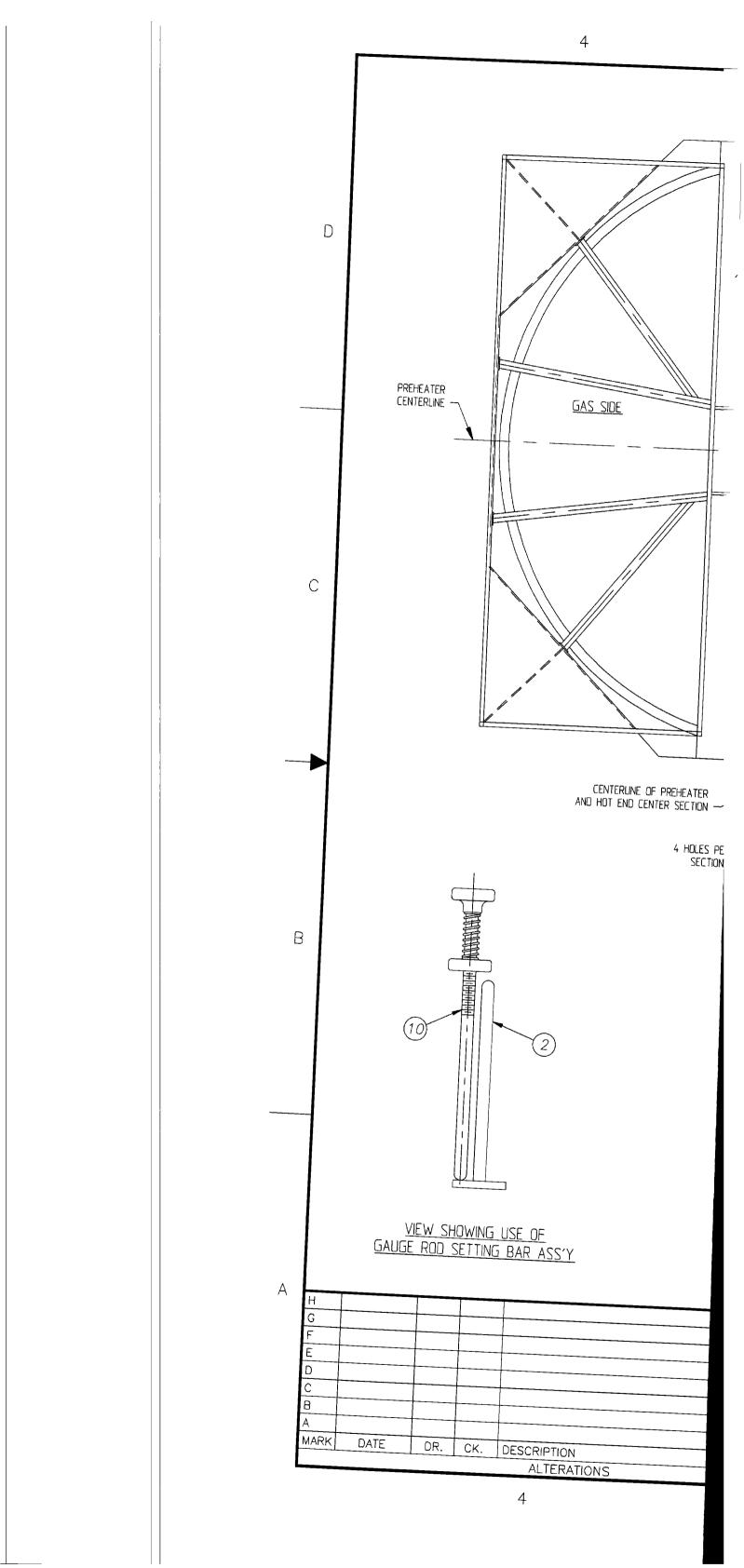
SEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER— WISE SPECIFIED THIRD ANGLE	ALSTØM	ALSTOM Power Inc. Air Preheater Company Wellsville, New York				
SUPERSEDED	SUBJECT AIR PREHEATER API NO.		OT END SEAL				
ES	SIZE 33.5 VI MOD	CLEARANCE GAUGE ASS'Y					
SEE	DR WDS CK DV	CODE GROUP	SIZE DWG NO. REV				
SUPERSEDES	APPR. BY	ER 0401	C 10041246				
S	DATE 10-25-04	SCALE NTS	WT SHEET OF				

1

D



IP7_033857



ATERIAL			
		 _	

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С

В

			BILL OF MATERIAL	
REF.	REQ'D.	MAT'L.	DESCRIPTION	SL
1	24		"A" BASKET SEALING BAR ASSEMBLY	SL
2	24		"B" BASKET SEALING BAR ASSEMBLY	SL
3	48		"C" BASKET SEALING BAR ASSEMBLY	SL
4	48		"D" BASKET SEALING BAR ASSEMBLY	SL
5	48		"E" BASKET SEALING BAR ASSEMBLY	SL
6	48		"F" BASKET SEALING BAR ASSEMBLY	SL
7	24		"FC" BASKET SEALING BAR ASSEMBLY	SL
8	48		"G-33.5"-OUT BSK'T SEALING BAR ASS'Y	SL
9	24		"GC-33.5"-OUT BSK'T SEALING BAR ASS"Y	SL

MAIN DIAPHRAGM "F" BASKET "G-33.5" BASKET BASKET "FC" BASKET "GC-33.5" BASKET BASKET "F" BASKET "G-33.5" BASKET - MAIN DIAPHRAGM

THIS DRAWING IS THE PROPERTY OF ABB AIR PREHEATER, INC AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR PART TO FURNISH ANY INFORMATION FOR MAKING OF DRAWINGS OR FOR MANUFACTURE OR SALE OF EQUIPMENT REPRESENTED THEREON WITHOUT WRITTEN PERMISSION OF THE ABB AIR PREHEATER, INC.

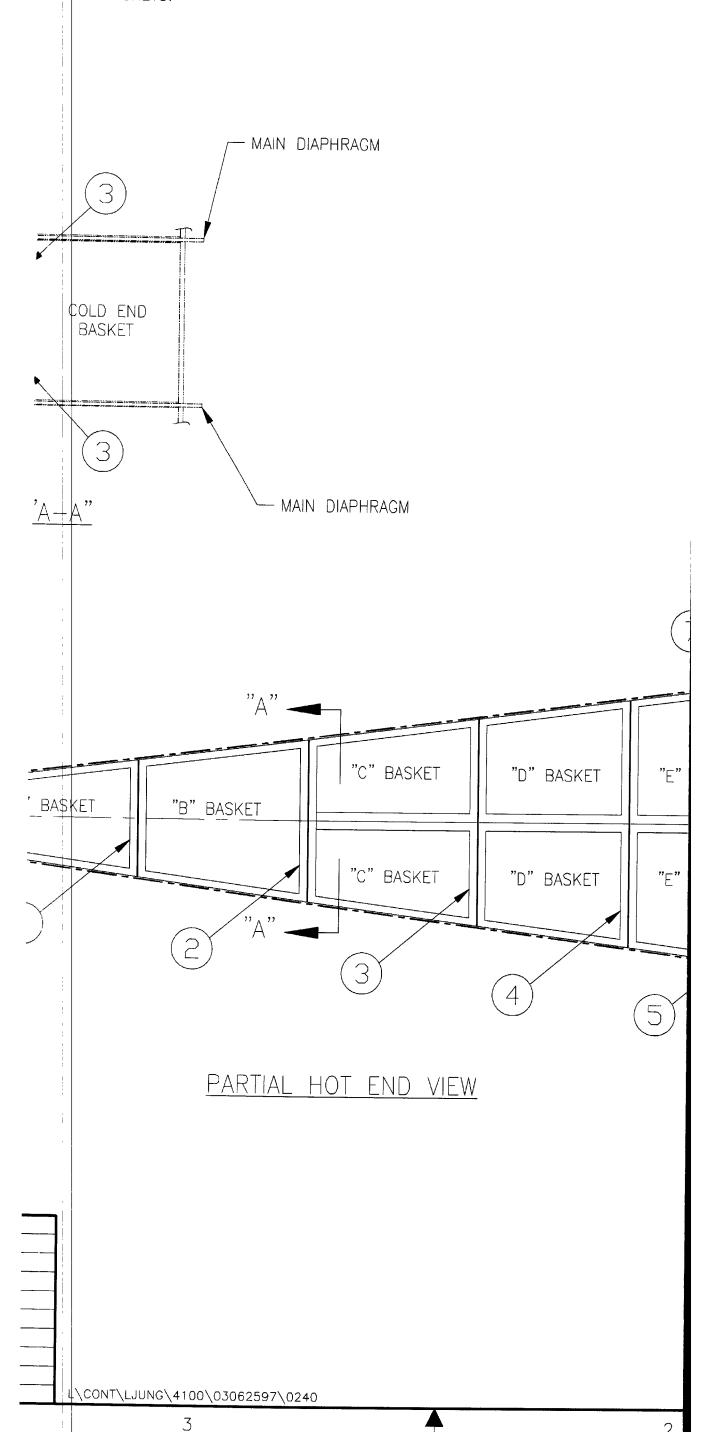
SUPERSEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER- WISE SPECIFIED THIRD ANGLE	ABB AIR PREHEATER, INC. WELLSVILLE, NEW YORK						
UPER	SUBJECT AIR PREHEATER	BASK	ET SEALING BAR					
S	API NO.	ARRANGEMENT						
SES	SIZE 33.5 V-VI							
SSE	DR CU CK CU	CODE GROUP	SIZE DWG NO. REV					
SUPERSEDES	APPR. BY	ER 0204	C 80030675					
8	DATE 12/11/03	SCALE NTS	WT SHEET OF					

1

03062718

Α

ALLING COLD END BASKETS, INSTALL REF. #1 THRU #9 HOT AND COLD END BASKETS. DO NOT WELD IN PLACE. NG BARS AS REQUIRED TO FIT COMPARTMENTS.)T END BASKETS.



ALTERATIONS

L\STD\BASKET\ARRGT\33.5

S THE USE OF NOTES #1 THROUGH #11 BELOW:

, 5, 6, 7, 8, & 11 ARE GENERAL NOTES FOR ALL JOBS.

REQUIRED ONLY IF SPECIFIED ON THE ERECTION DRAWING.

, & 10 ARE SPECIFICALLY FOR FULL PENETRATION WELDS.

WILL BE 100% VISUALLY EXAMINED AND DOCUMENTED TO ENSURE PRECEDING REQUIREMENTS.

WILL BE MAGNET PARTICLE OR LIQUID PENETRANT EXAMINED IN PENDIX 6 OR APPENDIX 8 RESPECTIVELY ASME CODE, SECTION VIII, ITION TO ENSURE THE SURFACES ARE FREE FROM DEFECTS AND SED TO ENSURE THEY MEET THE MINIMUM SIZE REQUIREMENT PAWING

N WELDS WILL BE ULTRASONIC EXAMINED IN ACCORDANCE WITH CODE, SECTION VIII, DIVISION 1 LATEST EDITION.

AGNETIC PARTICLE AND ULTRASONIC EXAMINATIONS MUST NOT BE E WELD HAS COOLED TO AMBIENT TEMPERATURE.

COMPANY, INC. AND/OR AUTHORIZED REPRESENTATIVES SHALL HAVE ESS TO INSPECT AND/OR TEST WELDS AND DETERMINE COMPLIANCE TENTS.

STING SHALL BE PROGRESSIVE TO ENSURE THAT PROCESS OR RE NOT PERPETUATED.

TACH WELD SHALL BE VISUALLY INSPECTED. PREHEAT SHALL INTAINED THROUGHOUT THE WELDING CYCLE.

WELDING PROCEDURE IS TO DEPOSIT HIGH QUALITY, LOW HYDROGEN RDANCE WITH THE REQUIREMENTS OF AWS D1.1 OR

HE WELDING IS TO BE CARRIED OUT UNDER THE DIRECTION OF N AND Q.C. PERSONNEL WHO FULLY UNDERSTAND THE INTENT OF DING CODES AND WELDING PROCEDURES.

ATION OF FULL PENETRATION WELDS IS AN ACCEPTABLE ALTERNATIVE NATION AND IS TO BE DONE IN ACCORDANCE WITH ASME CODE,

1 LATEST EDITION ACCEPTANCE CRITERIA PER PARAGRAPH UW.51.

1 ON SHALL BE PERFORMED AT BOTH HOT AND COLD ENDS WHERE

1 INED TO THE STUB DIAPHRAGM. A SPOT ULTRASONIC EXAMINATION

3 HALL BE DONE TO THE DIAPHRAGM TO STUB DIAPHRAGM JOINT

END SECTIONS WHEN FULL PENETRATION WELDS ARE SPECIFIED. IF

ONS ARE FOUND, THE ENTIRE LENGTH OF THE WELD WILL BE

E AREAS WILL BE REPAIRED AND RE-EXAMINED BY ULTRASONIC

49 ABOVE.

BE A MINIMUM OF 1/8" (3mm) UNLESS OTHERWISE SPECIFIED. IN ELDS REQUIRED ON A DYNAMIC COMPONENT THE MINIMUM SIZE IS

DING NOTE

TOR TO BE GROUNDED ANY TIME WELDING
R AIR ARCING IS TAKING PLACE TO PREVENT
TO BEARINGS AND DRIVES.

AL NOTE

ME AIR PREHEATER PARTS ARE PRODUCED FROM
RING STEEL (LACR) FOR CORROSION RESISTANCE.
'ECIFIC LOCATIONS OF WEATHERING STEEL ON AN
PLEASE SEE THE SPECIFIC ASSEMBLY DRAWING OR
T YOUR REGIONAL AIR PREHEATER SALES OFFICE,
ERPRESENTATIVE OR YOUR INSIDE SALES
'ENTATIVE.

THIS DRAWING IS THE PROPERTY OF AIR PREHEATER COMPANY AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART TO FURNISH ANY INFORMATION FOR MAKING OF DRAWINGS OR FOR MAKING OF DRAWINGS OR FOR MAKING OF SALE OF EQUIPMENT REPRESENTED THEREON MITCHOLLY WOLTERN DEPUISION OF AIR PREMEATER COMPANY

TS		_					FACTURE OR SALE OF EQ ITTEN PERMISSION OF			
NG -	ERSEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER— WISE SPECIFIED	THIRD ANGLE	ALS	TØM	A	ALSTOM Po Air Preheater Wellsville, Ne	Company	7	
VISE BE IN	DES SUPERS	API NO. SIZE	EHEATER			,	L WELE			
WITH	ERSEC	DR RF	CK	CODE	GROUP	SIZE	DWG NO.		RI	EV
ICTURAL OR	SUPER	APPR. BY	1 2	ER	0100	С	65357			P
	U)	DATE 1-30	-75	SCALE NT	.C	WT		SHFFT	OF	

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N IX LATEST REVISION PER CONTRACT N II PART C SFA - 5 1 AND SFA - 5.5.) ARBON STEEL (LACR) AND LIKE MATERIALS.

F AWS A5.1/ASME SFA-5.1 GRADE E7018 E8018-W2 LOW HYDROGEN ELECTRODES LDING PROCESSES MAY BE USED WITH

LED CONTAINERS. IMMEDIATELY AFTER OPENING ORED IN OVENS HELD AT A TEMPERATURE L BE REBAKED NO MORE THAN ONCE.

TTER ELECTRODES ARE REMOVED FROM BAKING OR SHALL NOT EXCEED FOUR (4) HOURS FOR)DES. ELECTRODES EXPOSED TO THE RETURNED TO A HOLDING OVEN MAINTAINED F FOUR (4) HOURS AT 250 DEGREES F. MINIMUM

REATER THAN THOSE PERMITTED SHALL BE THE MANUFACTURER'S INSTRUCTIONS OR THE

FREES F. AND \$00 DEGREES F.

NFORMING TO AWS AS 5/ASME SFA-5.5 SHALL BE
REES F AND 800 DEGREES F

EMPERATURE NOT EXCEEDING ONE HALF (1/2)

LF (1/2) HOUR PRIOR TO INCREASING THE OVEN

G TIME SHALL START AFTER THE OVEN REACHES

ED NO MORE THAN ONCE. ELECTRODES THAT

VFORMING TO AWS A5.1/ASME SFA-5.1 SHALL BE

AL OR VERTICAL UP POSITION UNLESS

RPECIFICATIONS: REHEAT RANGE

o F. (10° C) MINIMUM o F. (66° C) MINIMUM

0° F. (66° C) MINIMUM 25° F. (107° C)MINIMUM

OF DIRT, OIL, GREASE AND EXCESSIVE RUST SCALE

ELDING

LECTRODE WEAVING SHALL BE KEPT TO A MINIMUM ST REVISION. TACKWELDS MAY BE INCORPORATED BE FREE OF DEFECTS. IF TACKWELDS ARE FOUND ASE METAL MUST BE PREHEATED FOR TACKWELDING

CRACKS, PINHOLES, UNDERCUTS AND SHALL BE COVER PASSES SHALL BE FREE OF COARSE HIGH CROWNS, DEEP RIDGES, UNDERCUTS, ETC. ISION

PRE DEPOSITING THE NEXT SUCCESSIVE LAYER OF BRUSHED TO PERMIT THOROUGH VISUAL

BY CHIPPING OF GRINDING PRIOR TO DEPOSITING

3

ACCORDANCE WITH SECTION IX OF THE

THE FOLLOWING DETAIL

NOTES 1, 4

NOTE 2 IS 1

NOTES 3, 9

INSPECTION AND TEST—

1. ALL FINISHED WELDS

COMPLIANCE WITH THE

2. ALL FINISHED WELDS
ACCORDANCE WITH AP
DIVISION 1 LATEST ED
DIMENSIONALLY CHECK
SPECIFIED ON THE DR

3. ALL FULL PENETRATIO APPENDIX 12, ASME (

4. LIQUID PENETRANT, M. PERFORMED UNTIL THI 5. THE AIR PREHEATER (

FULL RIGHTS OF ACCE
WITH THESE REQUIREN

6. NON-DESTRUCTIVE TE OPERATOR DEFECTS A 7. THE ROOT PASS OF E

BE CONTINUOUSLY MA

8. THE INTENT OF THIS
WELD METAL IN ACCOUNTS

ASME SECTION IX. THE QUALIFIED SUPERVISION THE REFERENCED WELL

9. RADIOGRAPHIC EXAMIN

TO ULTRASONIC EXAMI SECTION VIII, DIVISION 10. ULTRASONIC EXAMINATI THE DIAPHRAGM IS JC 12" (305mm) LONG S

BETWEEN THÉ INITIAL
REJECTABLE APPLICATI
EXAMINED. REJECTABLE
METHODS PER NOTE &
SEAL WELDS ARE TO

THE CASE OF SEAL W 3/16" (4mm).

> GROUNL RO AND/OF DAMAGE

MATERIA SOI WEATHE FOR SF ORDER CONTAC SERVICE REPRES

	ASSEMBLY T UNLESS NOTED			TIELD WE NLESS I	ELD REQUIREMEN NOTED ON DRAW!!
24-	1 (0-610mm) 96(610-2438mm) 2 96(2438mm) ES	±0.13(3mm) ±0.19(5mm) ±0.25(6mm) ±0.5°	INCH_	RSIONS MM 3 4 6 8 10 12	FILLER METAL - E7018 UNLESS OTHERW SPECIFIED ALL WELDS TO CONFORMANCE AWS D1.1 STRU WELDING CODE EQUIVALENT

GENERAL WELDING SPECIFICATIONS:

ALL WELDING SHALL BE PER AWS D1.1 AND/OR ASME SECTIC REQUIREMENTS. (REFERENCE AWS A5.1, AWS A5.5, ASME SECTIO THIS SPECIFICATION IS INTENDED FOR A36. A-588. WEATHERING (

FILLER METAL-

D

 \mathbb{C}

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Α

THE FILLER METAL SHALL CONFORM TO THE REQUIREMENTS (LOW HYDROGEN ELECTRODES OR AWS A5.5/ASME SFA-5.5 GRADE BASED ON CONTRACT REQUIREMENTS. OTHER LOW HYDROGEN WE WRITTEN APPROVAL FROM The Air Preheater Company, Inc.

FILLER METAL STORAGE-

ALL ELECTRODES SHALL BE PURCHASED IN HERMETICALLY SETTHE HERMETICALLY SEALED CONTAINER, ELECTRODES SHALL BE STOFF AT LEAST 250 DEGREES FAHRENHEIT (F.). ELECTRODES SHALE ELECTRODES THAT HAVE BEEN WET SHALL NOT BE USED.

APPROVED ATMOSPHERIC TIME PERIODS-

AFTER HERMETICALLY SEALED CONTAINERS ARE OPENED OR A STORAGE OVENS, THE ELECTRODE EXPOSURE TO THE ATMOSPHER E7018 ELECTRODES OR TWO (2) HOURS FOR E8018-W2 ELECTRODES ATMOSPHERE FOR PERIODS LESS THAN THOSE PERMITTED MAY BE AT 250 DEGREES F. MINIMUM; AFTER A MINIMUM HOLD PERIOD OF THE ELECTRODES MAY BE REISSUED.

BAKING ELECTRODES-

ELECTRODES EXPOSED TO THE ATMOSPHERE FOR PERIODS GRADISPOSED OF OR BAKED ACCORDING TO THE MORE STRINGENT OF FOLLOWING:

 ALL ELECTRODES HAVING LOW HYDROGEN COVERINGS COL BAKED FOR AT LEAST TWO (2) HOURS BETWEEN 500 DEC
 ALL ELECTRODES HAVING LOW HYDROGEN COVERINGS CO

BAKED FOR AT LEAST ONE (1) HOUR BETWEEN 700 DEGI ALL ELECTRODES SHALL BE PLACED IN A SUITABLE OVEN AT A T OF THE FINAL BAKING TEMPERATURE FOR A MINIMUM OF ONE HA TEMPERATURE TO THE FINAL BAKING TEMPERATURE. FINAL BAKIN THE FINAL BAKING TEMPERATURE. ELECTRODES SHALL BE REBAK HAVE BEEN WET SHALL BE DISCARDED.

POSITION-

ALL WELDING SHALL BE PERFORMED IN THE FLAT, HORIZONTA INSTRUCTIONS ON DRAWINGS STATE OTHERWISE.

PREHEAT-

THE FOLLOWING SCHEDULE SHOWS RECOMMENDED PREHEAT BASE METAL THICKNESS

O" TO 1.50" INCLUSIVE (0mm TO 38mm)

1 50" TO 2.50" INCLUSIVE (38mm TO 64mm)

OVER 2.50" (64mm)

THICKEST SECTION OF BASE METAL TO BE JOINED.

15

22

PREPARATION OF BASE METAL-

THE SURFACES TO BE JOINED BY WELDING SHALL BE FREE OR OTHER FOREIGN MATTER.

ELECTRICAL CHARACTERISTICS-

DIRECT CURRENT REVERSE POLARITY SHALL BE USED FOR W

PROCEDURE-

ALL WELDS SHALL BE MADE AS SPECIFIED ON DRAWINGS. EAND SHALL NOT EXCEED THE REQUIREMENTS OF AWS D1.1 LATE IN THE WELD IF THEY ARE VISUALLY INSPECTED AND FOUND TO UNACCEPTABLE THEY ARE TO BE REMOVED BEFORE WELDING. BPER PREHEAT SCHEDULE.

WORKMANSHIP AND VISUAL QUALITY-

EACH LAYER OF WELDING SHALL BE SMOOTH AND FREE OF COMPLETELY FUSED TO ADJACENT WELD BEADS OR BASE METAL. RIPPLES, IRREGULAR SURFACES, NON-UNIFORM BEAD PATTERNS, AND CONFORM TO THE REQUIREMENTS OF AWS D1.1 LATEST REV

CLEANING-

ALL SLAG SHALL BE REMOVED FROM EACH WELD BEAD BEFO WELD METAL. FINISHED WELDS MUST BE DE—SLAGGED AND WIRE INSPECTION AND NON—DESTRUCTIVE EXAMINATION.

DEFECTS-

CRACKS, PINHOLES OR POOR TIE—INS SHALL BE REMOVED E SUBSEQUENT LAYERS OF WELD METAL.

QUALIFICATIONS-

WELDING PROCEDURES AND WELDERS MUST BE QUALIFIED IN ASME BOILER AND PRESSURE VESSEL CODE OR AWS D1.1.

U								
T								
S								
R								
Q								
P 0	10/09/01	JRC	AGM	MODIFIED INSPECTION NOTE #1				
	06/21/00	KMF	ACS	ADDED CLARIFICATION FOR SPECIFIC NOTES				
N	06/10/99	GP	KMF	REDRAWN FROM "D" SIZE & MODIFIED NOTES				
MARK	DATE	DR.	CK.	DESCRIPTION				
	ALTERATIONS							

Des.

Dr. KAT

Material

Ch.

DATE 3-16-83 SCALENTS

ch. DV Ch.

CODES

80509

ER

(5/1% DIAPH.)

GROUP SIZE

0103 H

DRAWING NUMBER

SHEET

78077

NUMBER

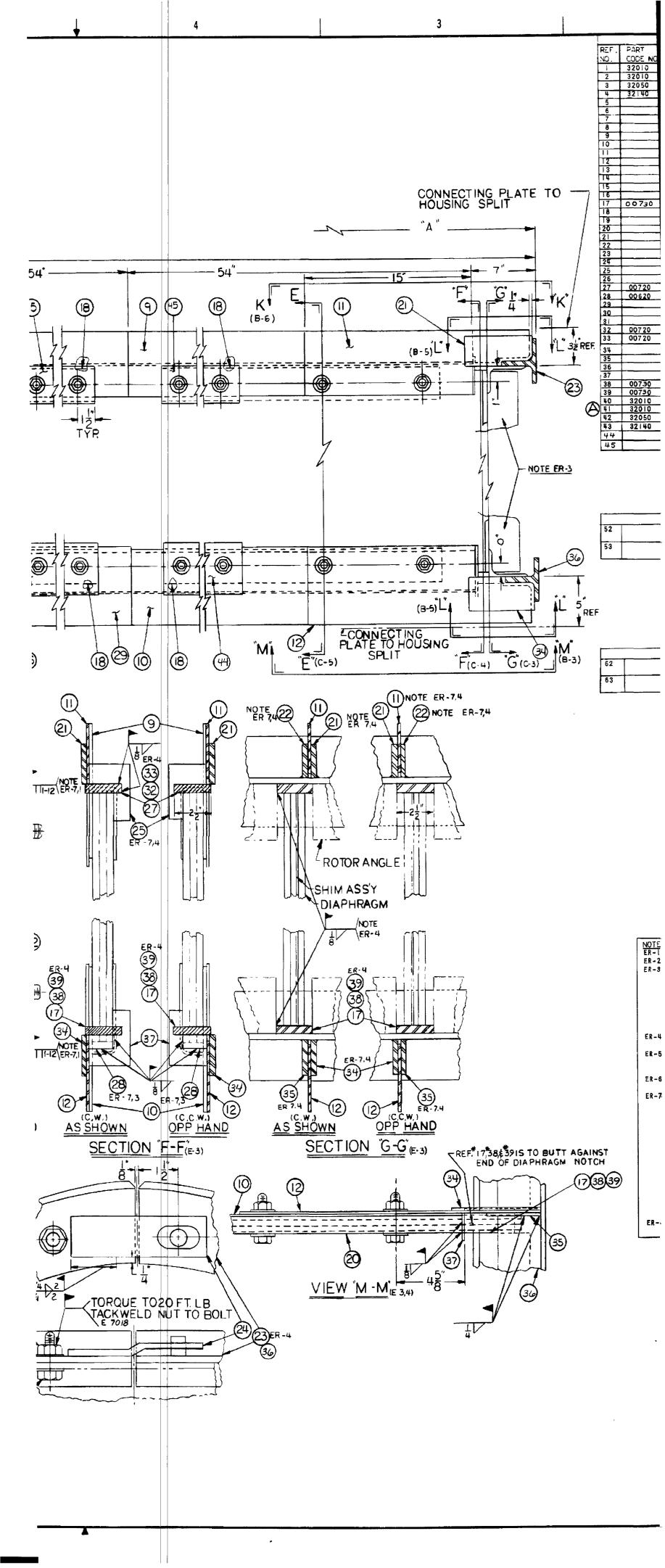
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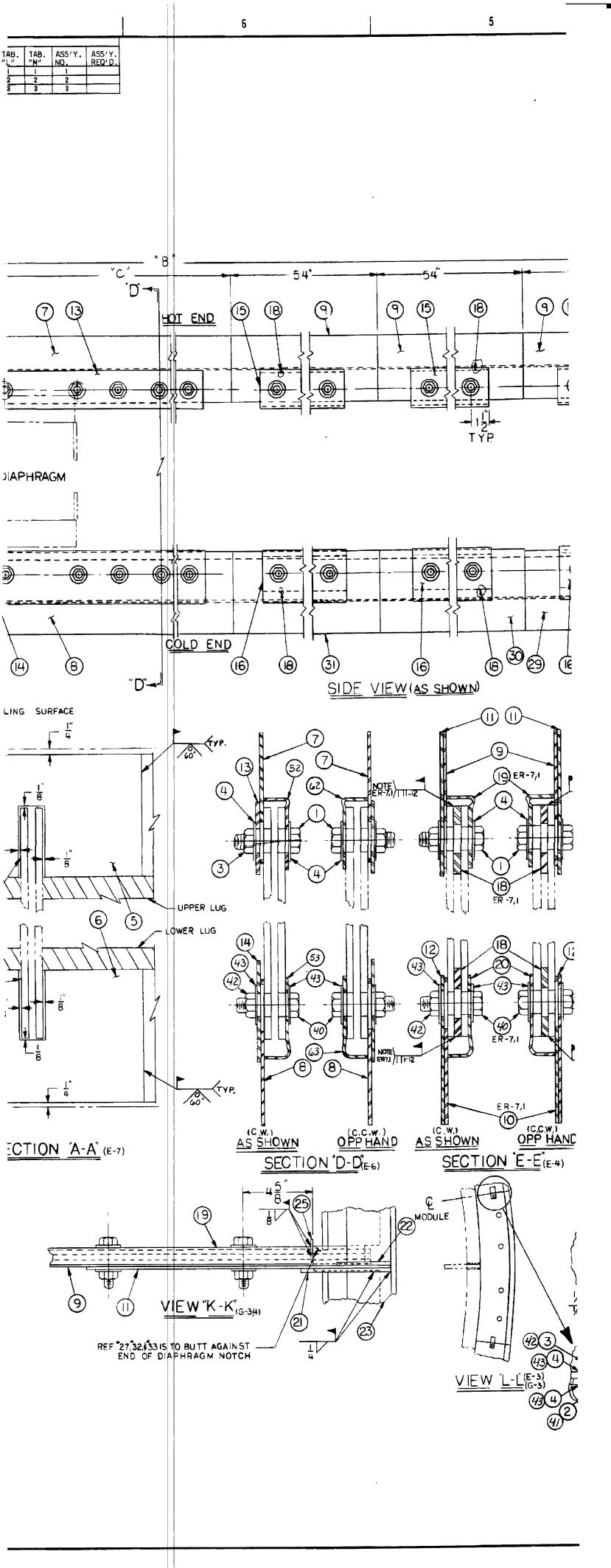
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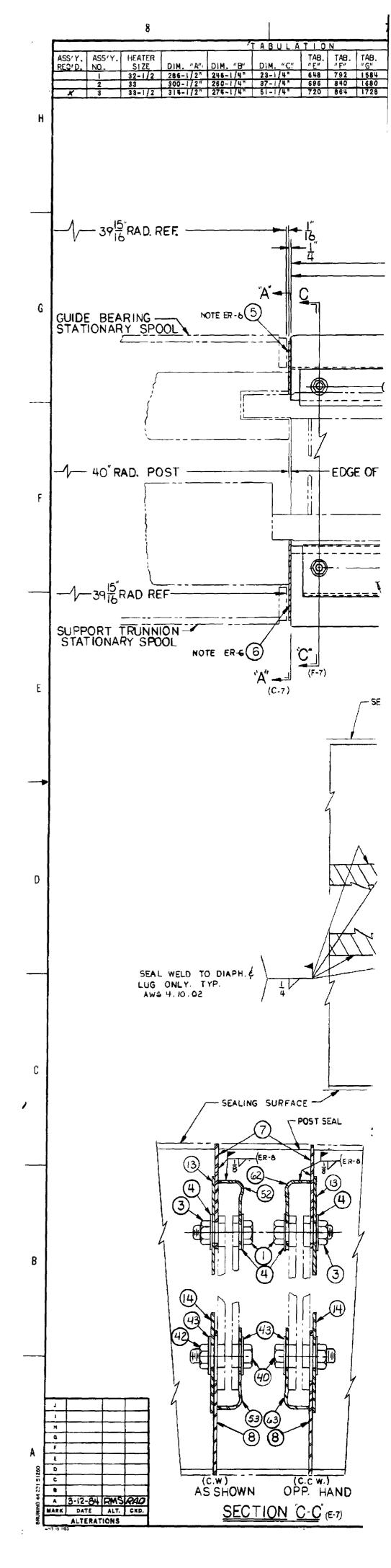
A

ISSUE

A







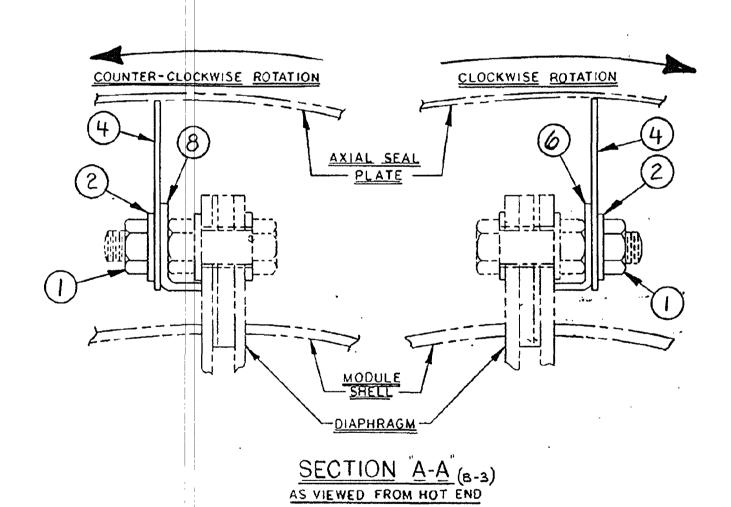
					BILL	OF MATERIAL			
REF.	PART CODE NO.	DR	AWING NO.	REQ'D.	MAT'L.	DESCRIPTION	LOFT		
1	32050		12-25412	"C"	3205	3/4" FIN. HEX. NUT	SL]	
2	32140		12-25413	"C"	3214	3/4" WASHER	SL]	
3			E"-78076	24		AXIAL SEAL LEAF (COLD END)	SL]	
4			F-78076	24		AXIAL SEAL LEAF (HOT END)	\$ L	1	
	THE FO	LLO	WING TO BE	FOR CLC	CKWISE R	NOTATION			
5		0-	G-76118	24		FORMED HOLDING STRIP (COLD END)	SL	D	
6			H-76117	24		FORMED HOLDING STRIP (HOT END)	SL	1	
	THE FOLLOWING TO BE FOR COUNTER-CLOCKWISE ROTATION								
7		D-	G-76117	24		FORMED HOLDING STRIP (COLD END)	SL	1	
8		20	H=76118	24		FORMED HOLDING STRIP (HOT END)	SL]	

1

NOTES TO ERECTOR:

REFER TO SEAL INSTALLATION & SETTING DRAWING SPECIFIED IN GROUP 2106.

NOTCH FORMED HOLDING STRIP TO FIT AT ASSEMBLY. ER-2

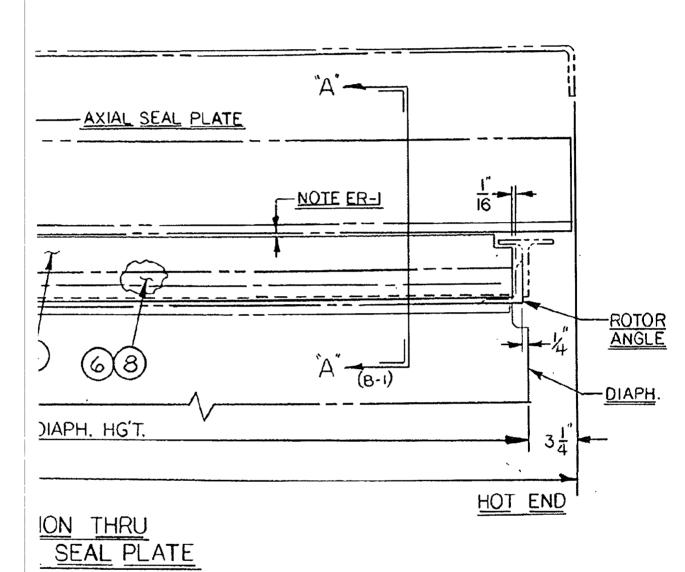


2 LAYER SIDE REMOVAL - DEF. SECTOR PL.

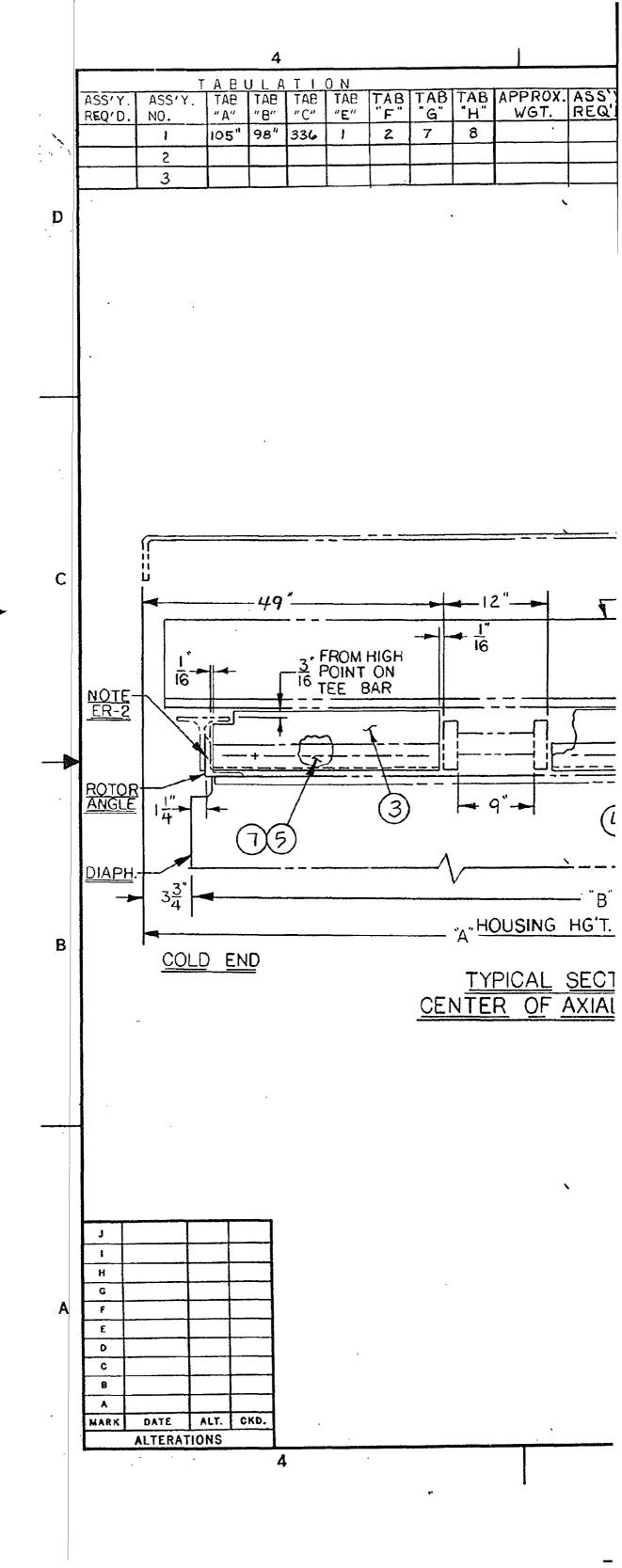
	SED BY	Subject AIR	PREF	IEAT	ER	PROCESS CE AIR PREHEATER WELLSVILLE, NEW YORK					
AND	SUPERSED	Des. Dr. KAT	MO['* 32 ½ -			AX	AXIAL SEAL ASSEMBLY 9"-clear pin length				
IT TO	OES	Tr.		Ch.		CODES		DR	AWING NUMBER	`	
FOR	RSED	Material		FR	GROUP	SIZE	NUMBER	ISSUE			
HOUT	SUPE	Stk. No.	k. No.			80100	0504	С	78075		
	:	DATE 3-	15-83	SCALE	NTS	M	WT.		SHEET	OF .	

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BILL OF MATERIAL REF DRAWING NO. QTY. MATL DESCRIPTION S.L. BYPASS SEAL (HOT END) ASS'Y #"R" ARRG'T #1 TAB "N' SL $\widehat{\mathbb{B}}$ B-99296 BYPASS SEAL (COLD END) ASS'Y #"R" ARRG'T #2 B-99296 TAB "N' SL P-12-25404 TAB "P" 63" X 1.5" HEX HD. CAPSCREW SL3 3201 TAB "P" SL 4 P-10-25412 3205 63" FIN. HEX. NUT TAB "Q" SL 3214 .63" WASHER P-10-25413 TAB "S" SL E-67599 6 BYPASS SEAL HOLDING STRIP

NOTES TO ERECTOR

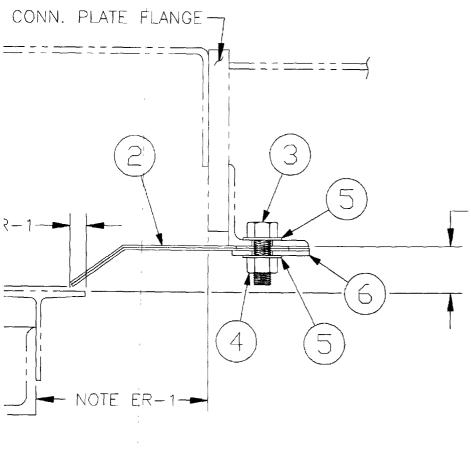
ER-2

ER-1 REFER TO SEAL INSTALLATION & SETTING DRAWING SPECIFIED IN GROUP 2106 AND GROUP 7000 SHEET.

LINE UP FIRST BYPASS SEAL WITH HOLES IN CONNECTING PLATE SEAL ANGLE.

TRIM SEALS TO FIT AGAINST SEAL PLATE AND SECTOR PLATE





1.75" NOM. (44mm) DOES NOT INCLUDE SEAL CLEARANCE NOTE ER-1 D

 \mathbb{C}

В

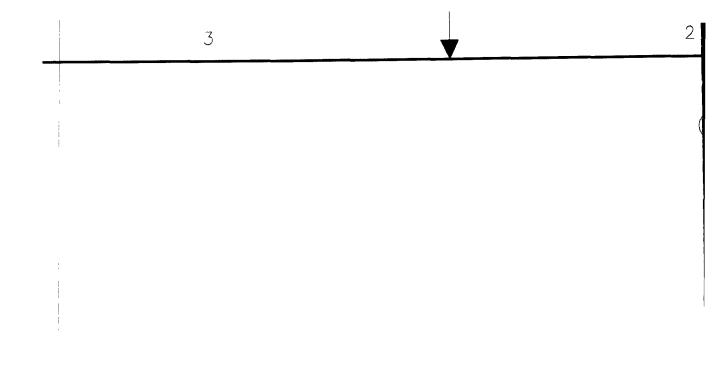
COLD END

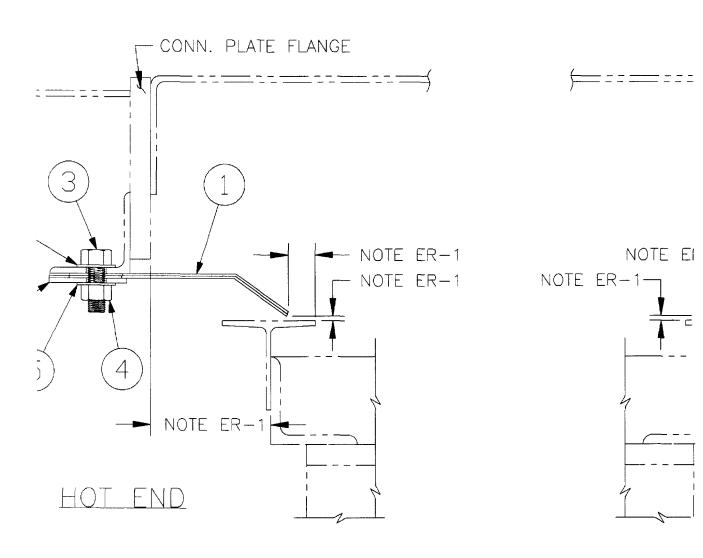
PASS SEAL

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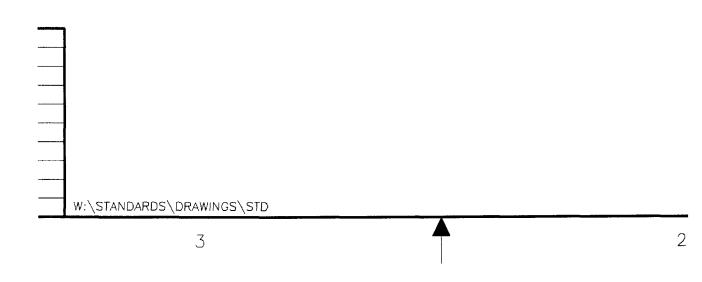
SEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER— WISE SPECIFIED	THIRD ANGLE	ALS	TØM	Air	LSTOM Po Preheater Wellsville, N	Com	pany	
SUPERSEDED	SUBJECT AIR PR API NO. SIZE V-VI-	EHEATER	EE-		(TM)	BYPAS ASS'Y		SEA	L
EDE	 		CODE	GROUP	SIZE	DWG NO.			REV
SUPERSEDES	DR CRW CK DPV		ER	0505	С	99297		,	В
S	PATE 02-1	1-2000	SCALE NT	S	WT		SHEET	OF	

1





TYPICAL SECTION SHOWING BY



		TABULATION										
	ASS'Y. NO.	HEATER SIZE	TAB "N"	TAB "P"	TAB "Q"	TAB "R"	TAB "S"	APPROX. WEIGHT				
	1	24.5	22	176	352	1	44	650#				
	2	25	22	176	352	2	44	650#				
	3	25.5	24	192	384	3	48	710#				
D	4	26	24	192	384	4	48	710#				
	5	26.5	26	208	416	5	52	770#				
	6	27	26	208	416	6	52	770#				
	7	27.5	28	224	448	7	56	830#				
	8	28	28	224	448	8	56	830#				
	9	28.5	34	272	544	9	68	1040#				
	10	29	34	272	544	10	68	1040#				
	11	29.5	36	288	576	11	72	1100#				
	12	30	38	304	608	12	76	1160#				
	13	30.5	40	320	640	13	80	1220#				
	14	31	40	320	640	14	80	1220#				
	15	31.5	42	336	672	15	84	1280#				
	16	32	44	352	704	16	88	1345#				
	17	32 5	46	368	736	17	92	1525#				
	18	33	48	384	768	18	96	1590#				
	19	<i>33</i> 5	50	400	800	19	100	1665#				
	20	34	54	432	864	20	108	1790#				
\sim	21	34.5	5 <i>6</i>	448	896	21	112	1900#				
	22	<i>3</i> 5	60	480	960	22	120	2023#				
	23	35.5	62	496	992	23	124	2090#				
	24	36	64	512	1024	24	128	2156#				
	25	29	34	272	544	25	68	1040#				

5)

6)

В

l				
Н				
G				
F				
Ε				
D				
С				
В	8-3-04	DV	ACS	ADDED ARRG'T TO REF #1 & 2 IN BILL OF MAT'L
Α	3-6-03	JRC	JRC	REMOVED SEQ. NOTES, ADD ALSTOM BORDER
MARK	DATE	DR.	CK	DESCRIPTION
				ALTERATIONS

/STANDARDS/DRAWINGS/STD/

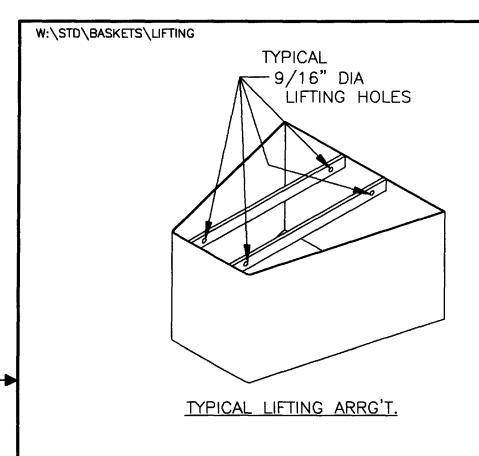
DECIMAL	FRACTIONAL EQUIVALENT
0.03	1/32
0.06	1/16
0.09	3/32
0.13	1/8
0.16	5/32
0.19	3/16
0.22	7/32
0.25	1/4
0.28	9/32
0.31	5/16
0.34	11/32
0.38	3/8
0.41	13/32
0.44	7/16
0.47	15/32
0.50	1/2

DECIMAL	FRACTIONAL EQUIVALENT
0.53	17/32
0.56	9/16
0.59	19/32
0.63	5/8
0.66	21/32
0.69	11/16
0.72	23/32
0.75	3/4
0.78	25/32
0.81	13/16
0.84	27/32
0.88	7/8
0.91	29/32
0.94	15/16
0.97	31/32
1.00	1

THIS DRAWING IS THE PROPERTY OF ABB AIR PREHEATER, INC AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR PART TO FURNISH ANY INFORMATION FOR MAKING OF DRAWINGS OR FOR MANUFACTURE OR SALE OF EQUIPMENT REPRESENTED THEREON WITHOUT WRITTEN PERMISSION OF THE ABB AIR PREHEATER, INC.

Н					
G F					
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Ε					
D C					
С					
В					
Α					
MARK	DATE	DR.	CK.		
ALTERATIONS					

			7411	THE TENTE !				
SEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER- WISE SPECIFIED	THIRD ANGLE	ABB AIR PREHEATER, INC. WELLSVILLE, NEW YORK					
SUPERSEDED	SUBJECT AIR PREHEATER		DECIMAL TO FRACTIONAL					
	API NO.		REFERENCE TABLE					
SÃ	SIZE V-VI-H							
SEE	DR VB	ск	CODE	GROUP	SIZE	DWG NO.		REV
SUPERSEDES	APPR. BY		ER	2200	E	98856	_	
S	DATE 06-30-99		SCALE NT	S	WT		SHEET	OF



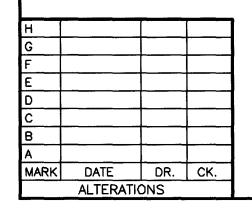
NOTES TO ERECTOR:

BASKETS TO BE LIFTED WITH 4 POINT LIFT. LIFTING HOLES ARE PROVIDED IN HOLDING BARS FOR CLEVISES OR SHACKLES. SIZE CLEVISES OR SHACKLES FOR A MAXIMUM 2400 LB. BASKET WEIGHT.

LIFTING EQUIPMENT FURNISHED BY OTHERS.

TO BE USED ON 90 DESIGN AND FULL WRAPPER BASKETS ONLY.

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SEDED BY	ALL DIMENSIONS ARE IN INCHES UNLESS OTHER— WISE SPECIFIED THIRD ANGLE	ALSTOM	ALSTOM Power, Inc. Air Preheater Company Wellsville, New York		
SUPERSEDED	SUBJECT AIR PREHEATER API NO.	LIFTING	G ARRANGEMENT		
SE	SIZE V-VI	7			
SUPERSEDES	DR BLM CK CU	CODE GROUP 1	SIZE DWG NO. REV		
E E	APPR. BY CU	ER 0202	E 99502		
S	DATE 06-23-00	SCALE NTS	WT SHEET OF		

	BILL OF MATERIAL						
QTY.	MAT'L.	DESCRIPTION	S.L.				
48		T-BAR TAB	S.L.				
48 48 48 48 288		T-BAR TAB	S.L.				
48		SPLICE BAR	S.L.				
48		T-BAR (ASS'Y. #3)	S.L.				
288	3201	0.63 X 1.75 HEX. HEAD CAPSCREW	S.L.				
288	3205	0.63 FIN. HEX. NUT	S.L				
576	3221	0.63 WASHER	S.L				

 \Box

BARS AND T-BAR TABS.

BETWEEN THE ROTOR SHELL AND THE DIAPHRAGM FOR FRACTURES. OUND, REMOVE THE EXISTING WELD TWO INCHES BEYOND THE JRE AND REWELD AS SHOWN IN SECTION "A-A".

(REF. #4) WITH THE ENDS LOCATED ON THE CENTER-LINES OF TMENTS AND TO THE RADIUS SHOWN WITH A TOTAL RUN-OUT OF LTS, NUTS, AND WASHERS ARE TO BE INSTALLED <u>EXACTLY</u> AS "A-A". TIGHTEN ALL BOLTS PRIOR TO WELDING.

#4) AND SPLICE BAR (REF. #3) AS SHOWN IN DETAIL "X" AND

DS (REF. #5) TO WASHERS (REF. #7) ACROSS FLATS 180° APART, D THE WASHERS TO THE ANGLES 180° APART FOR 0.75".

F. #6) AND THEN TORQUE TO 20 FT./LBS. THEN TACK WELD NOT TACK WELD THE NUT TO THE WASHER OR WASHER TO THE

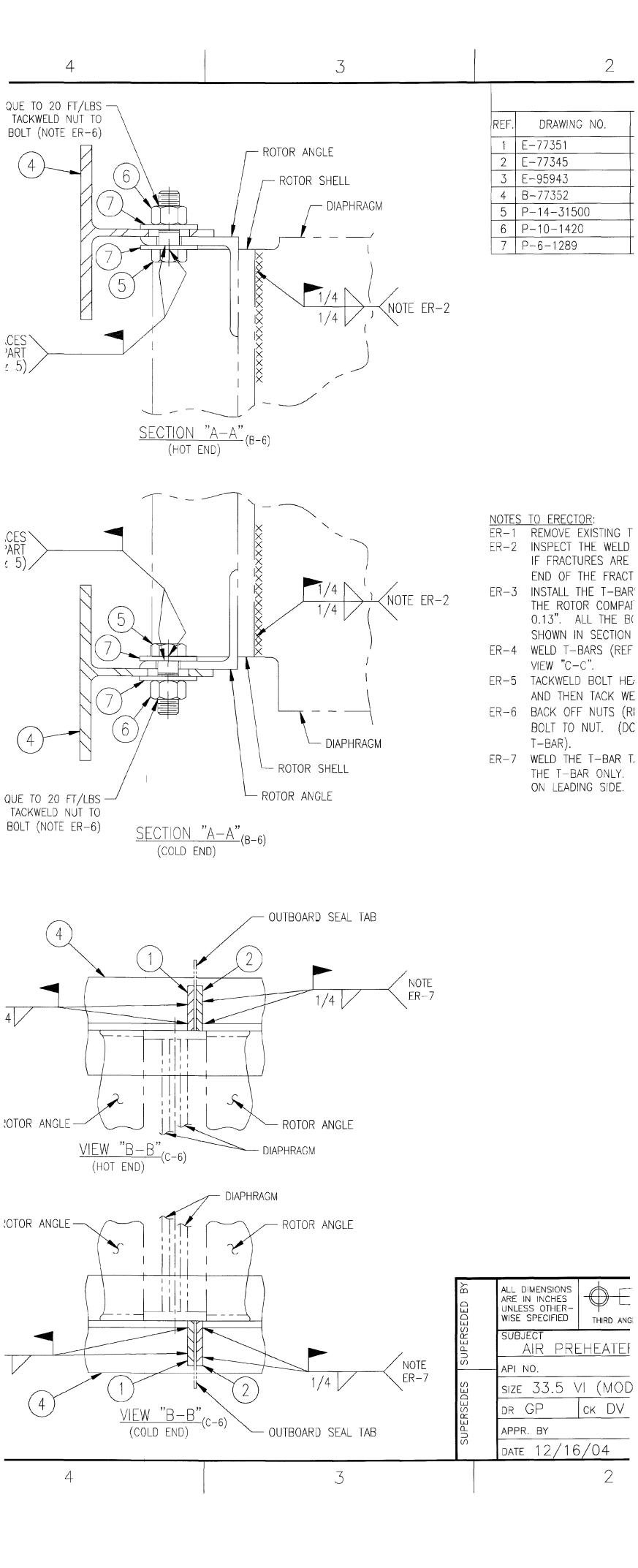
BS (REF. #1 & #2) AS SHOWN IN SECTION "B-B". WELD TO INSTALL REF. #1 ON TRAILING SIDE OF RADIAL SEALS AND REF. #2

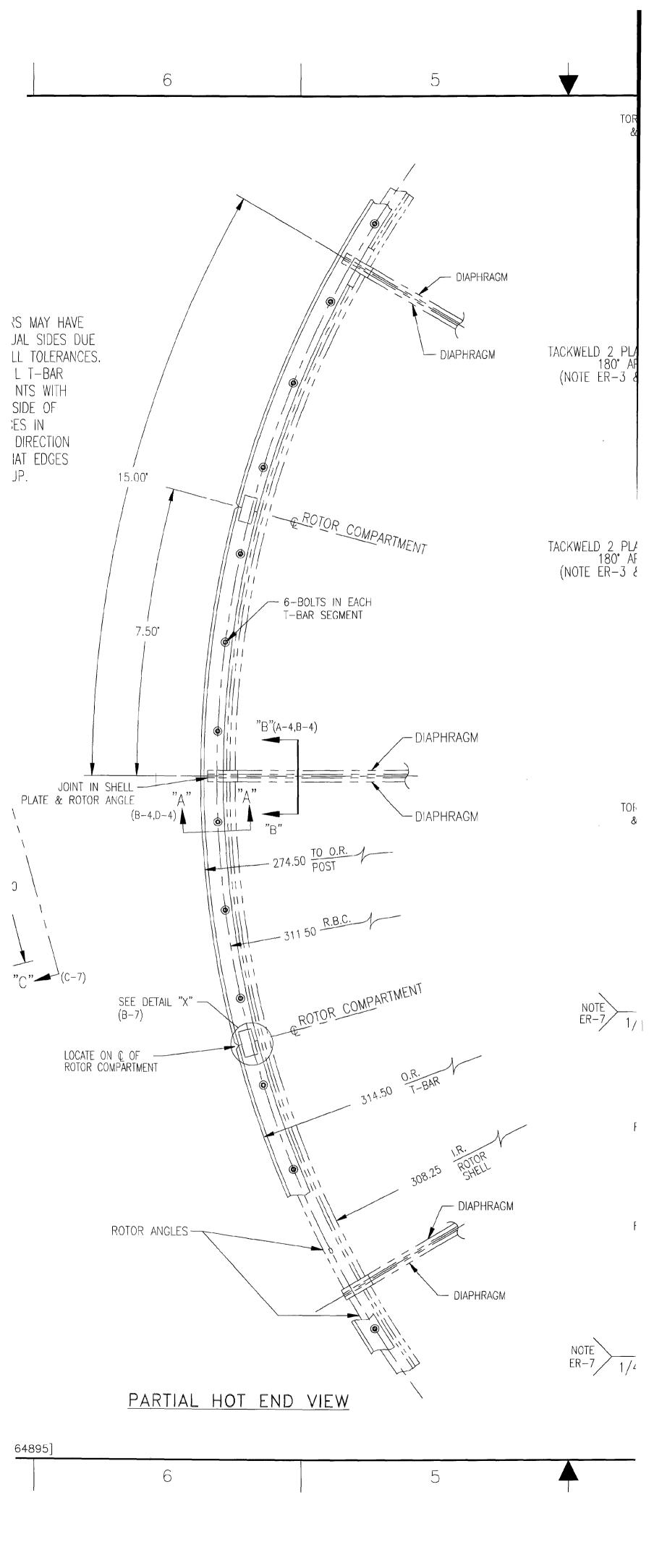
В

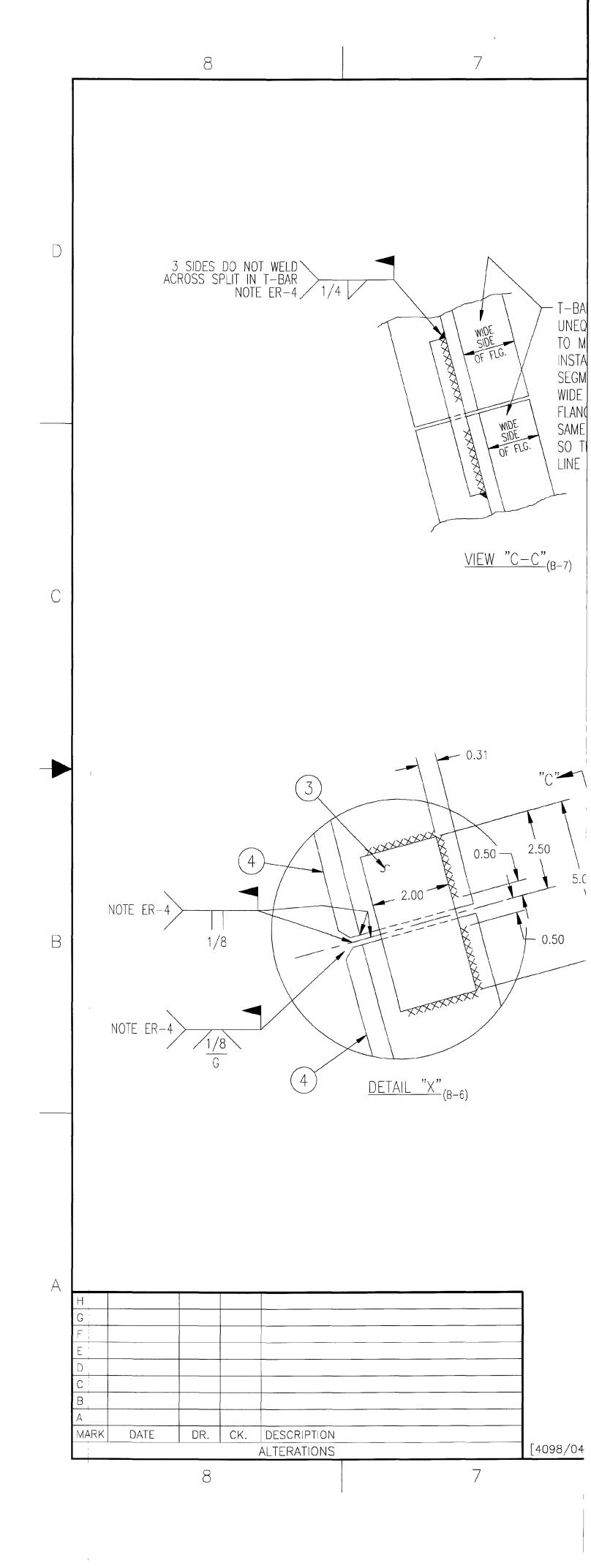
 \mathbb{C}

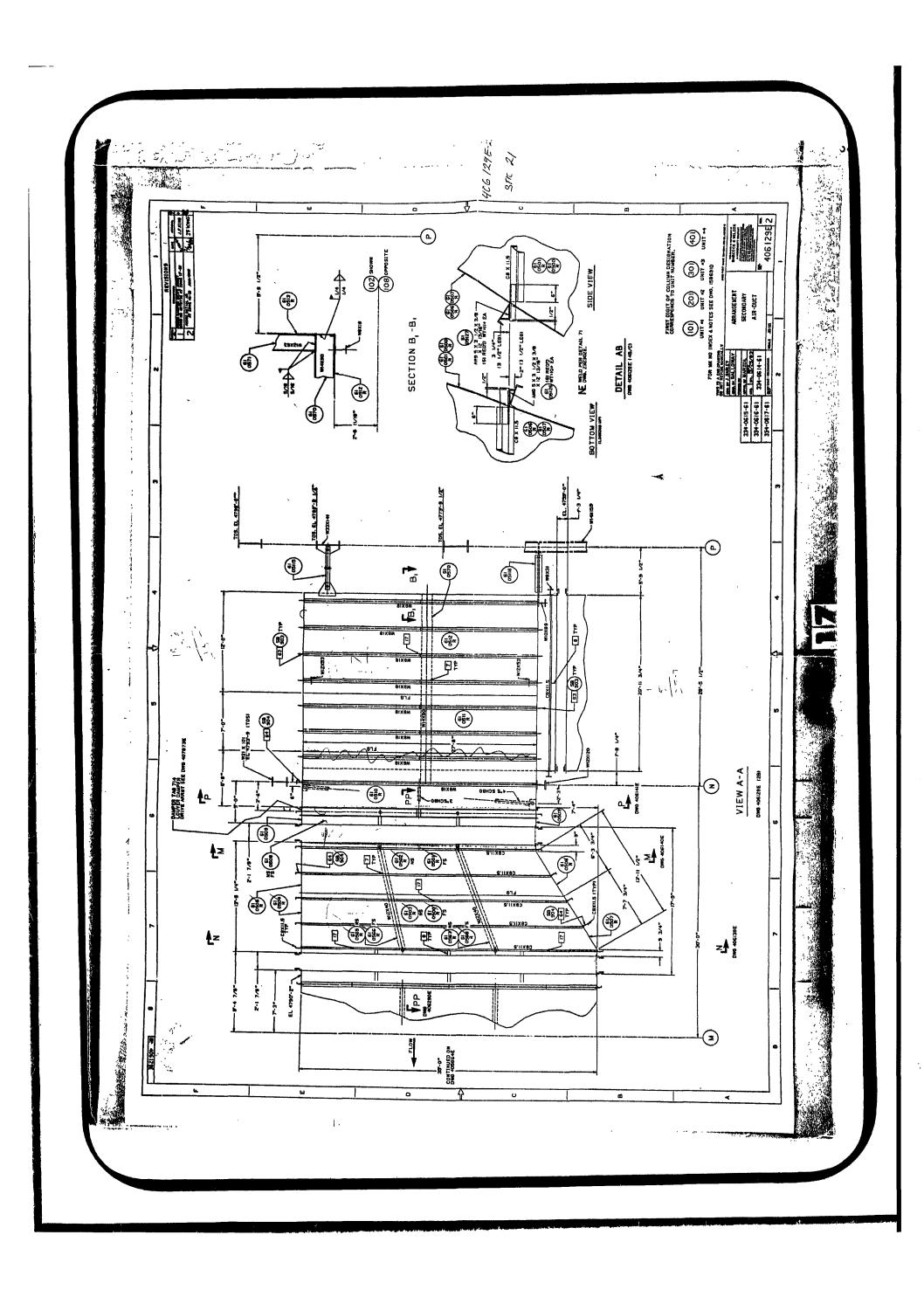
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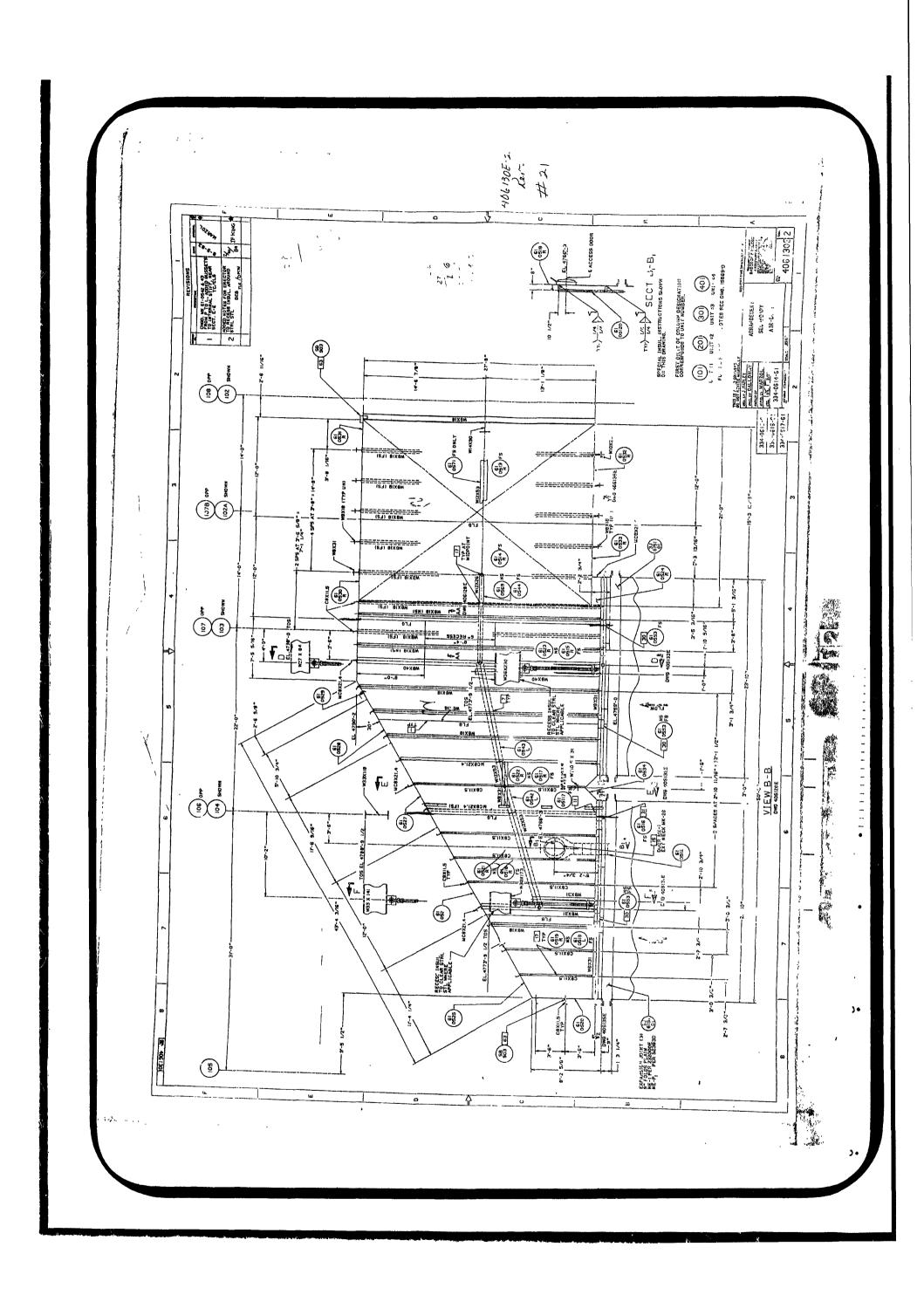
]	ALS [®]	TØM	ALSTOM Power Inc. Air Preheater Company Wellsville, New York			
			') END NSTALL		ING
	CODE	GROUP	SIZE	DWG NO.		REV
	ER	0103	D	10041	587	
	scale NT	S	'WT		SHEET	OF

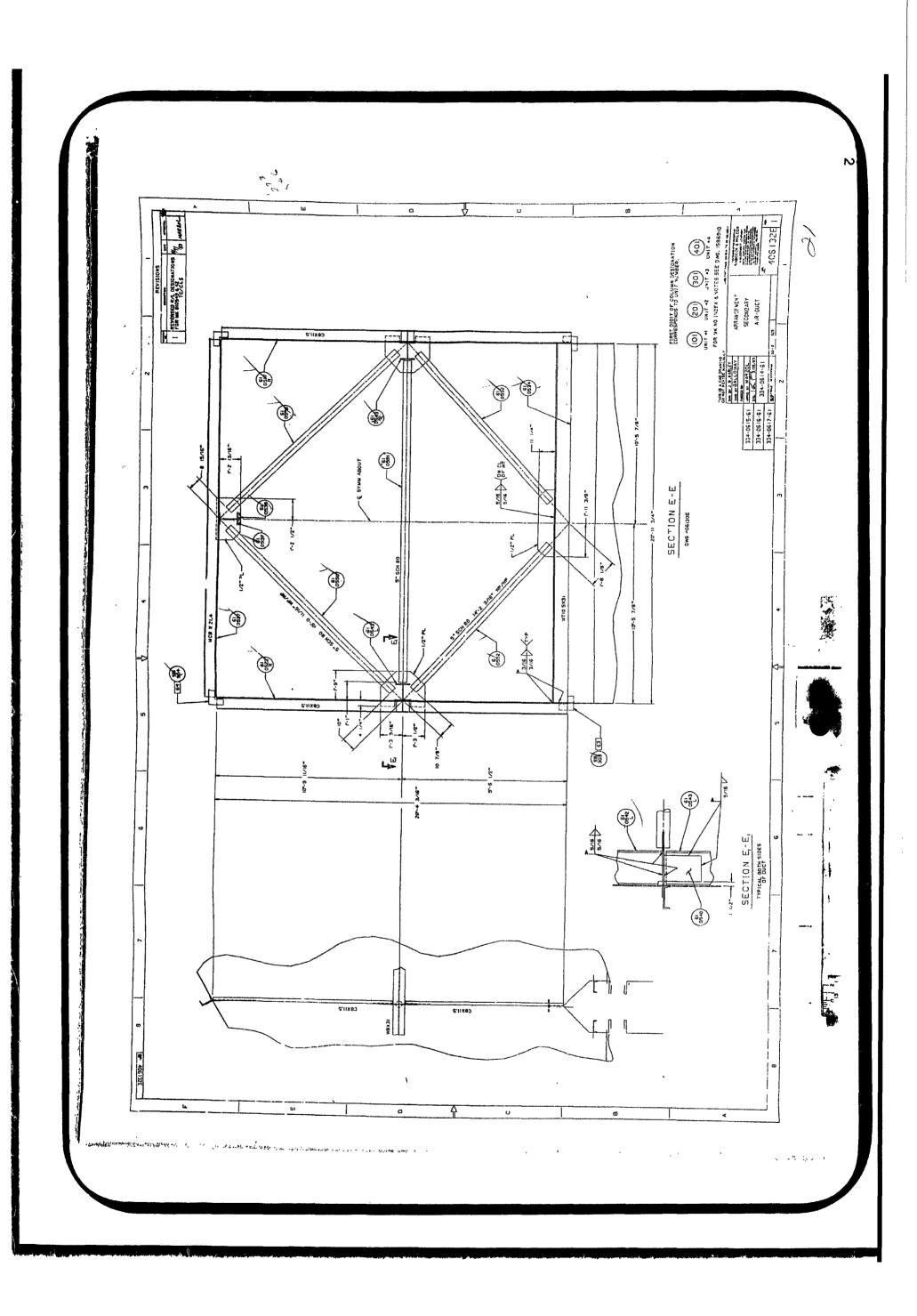


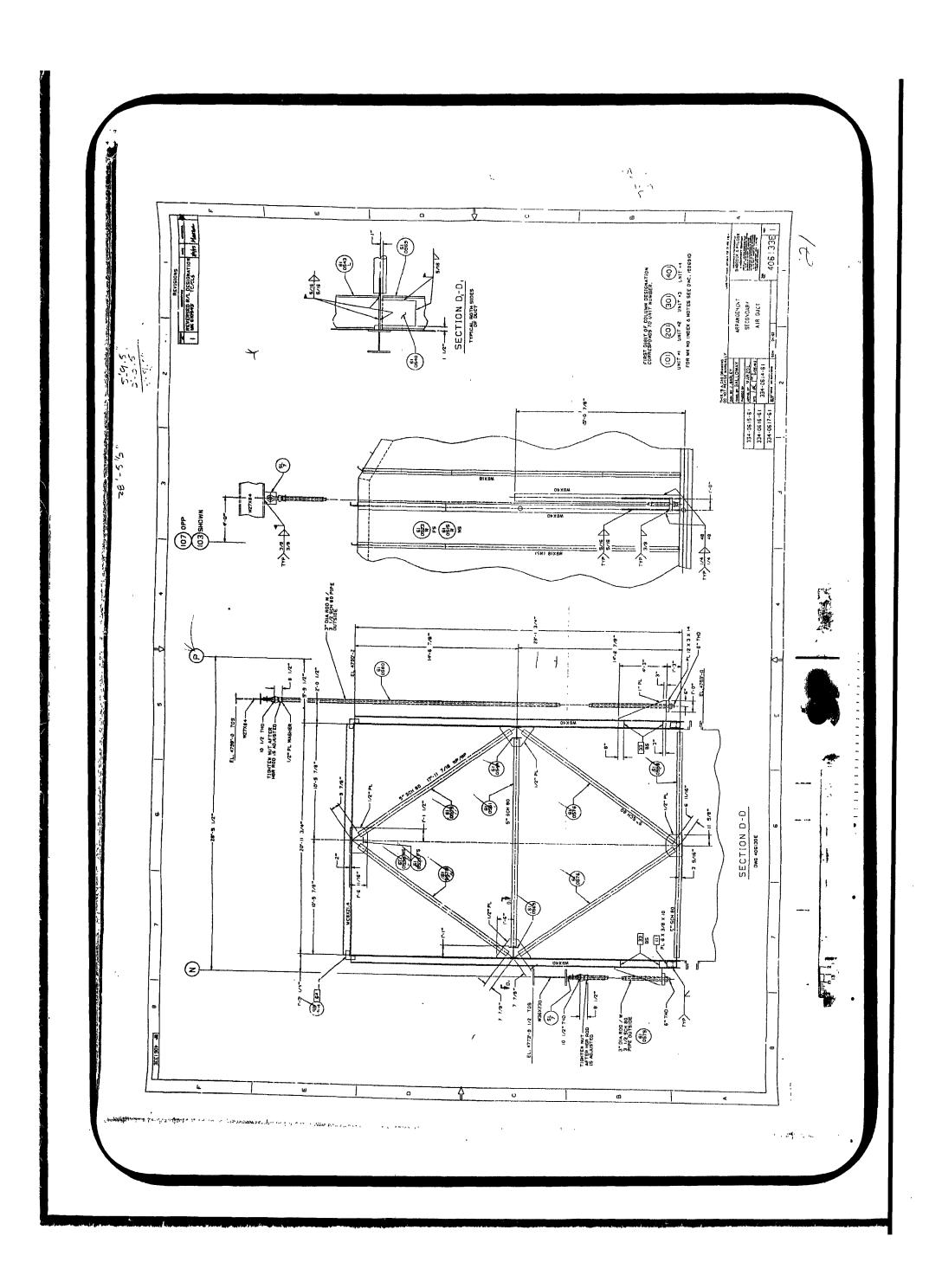


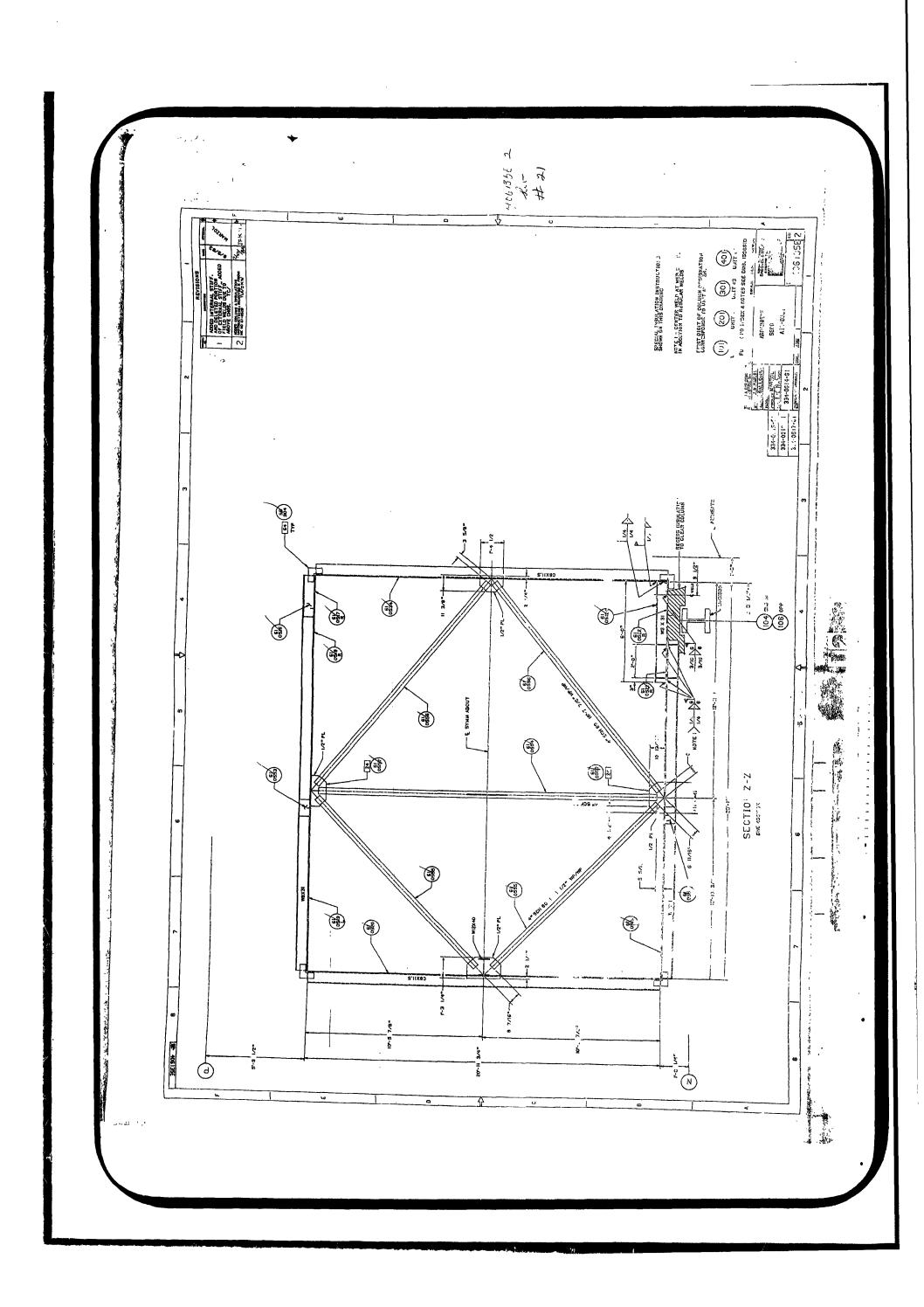


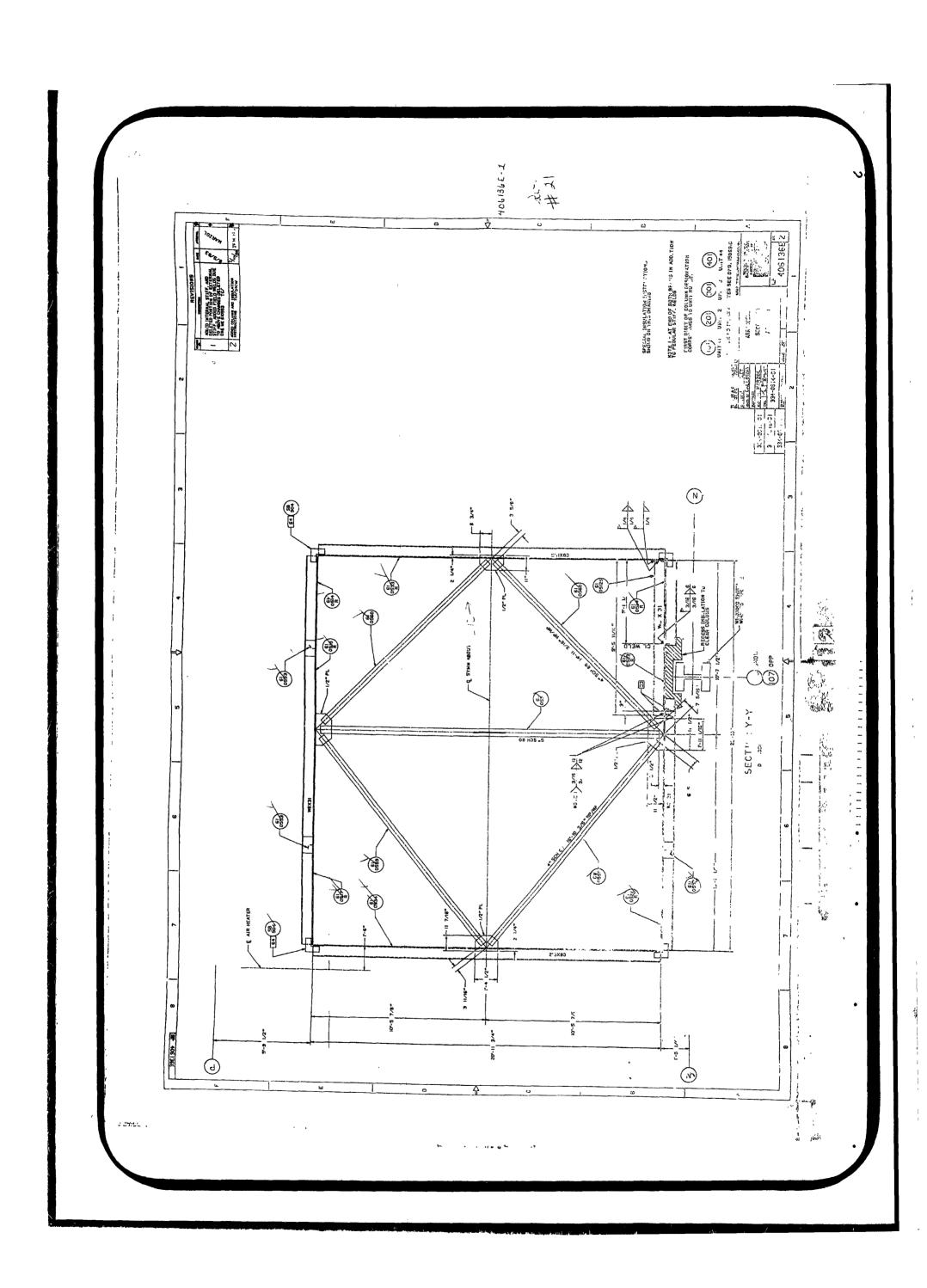


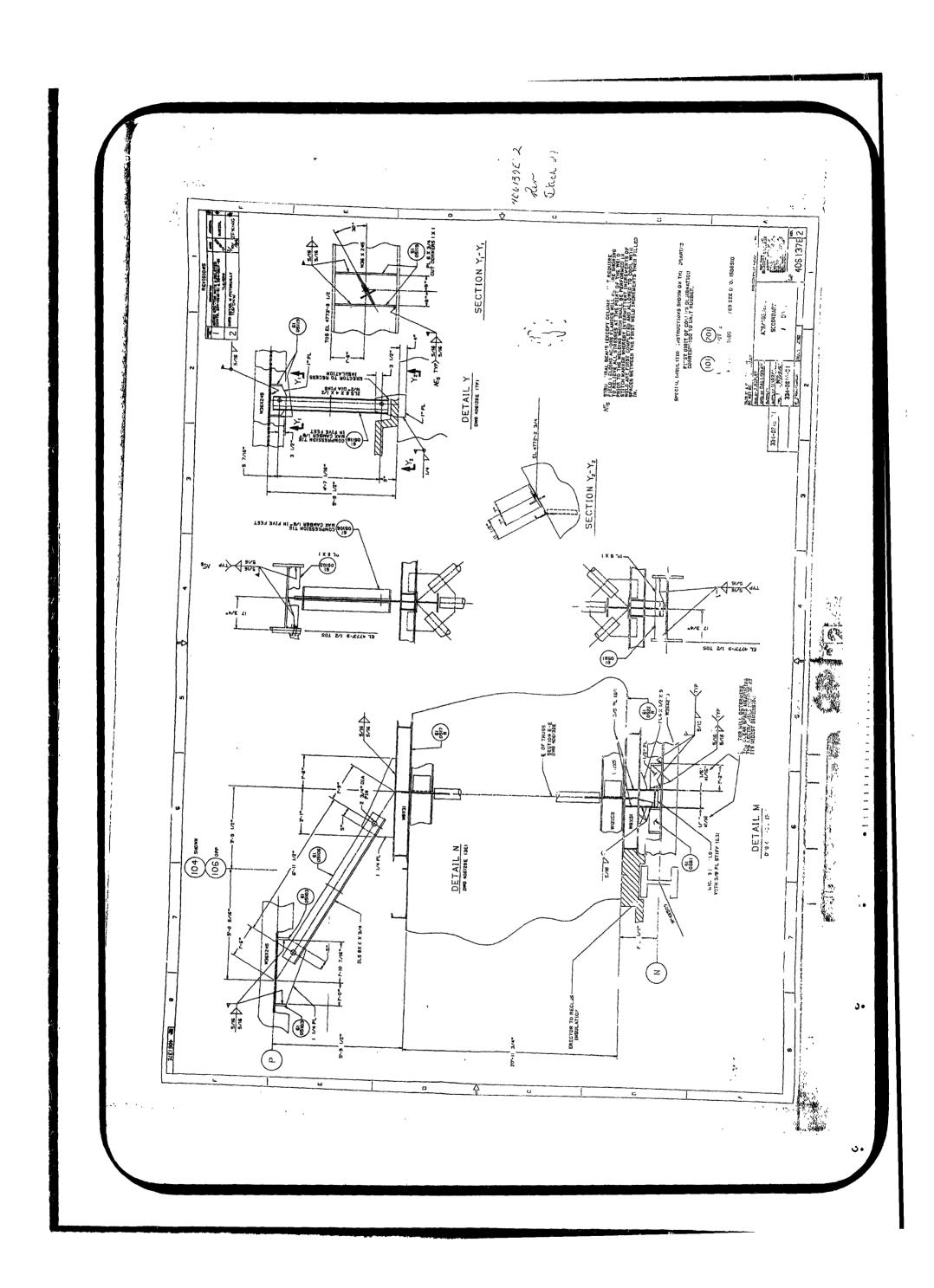


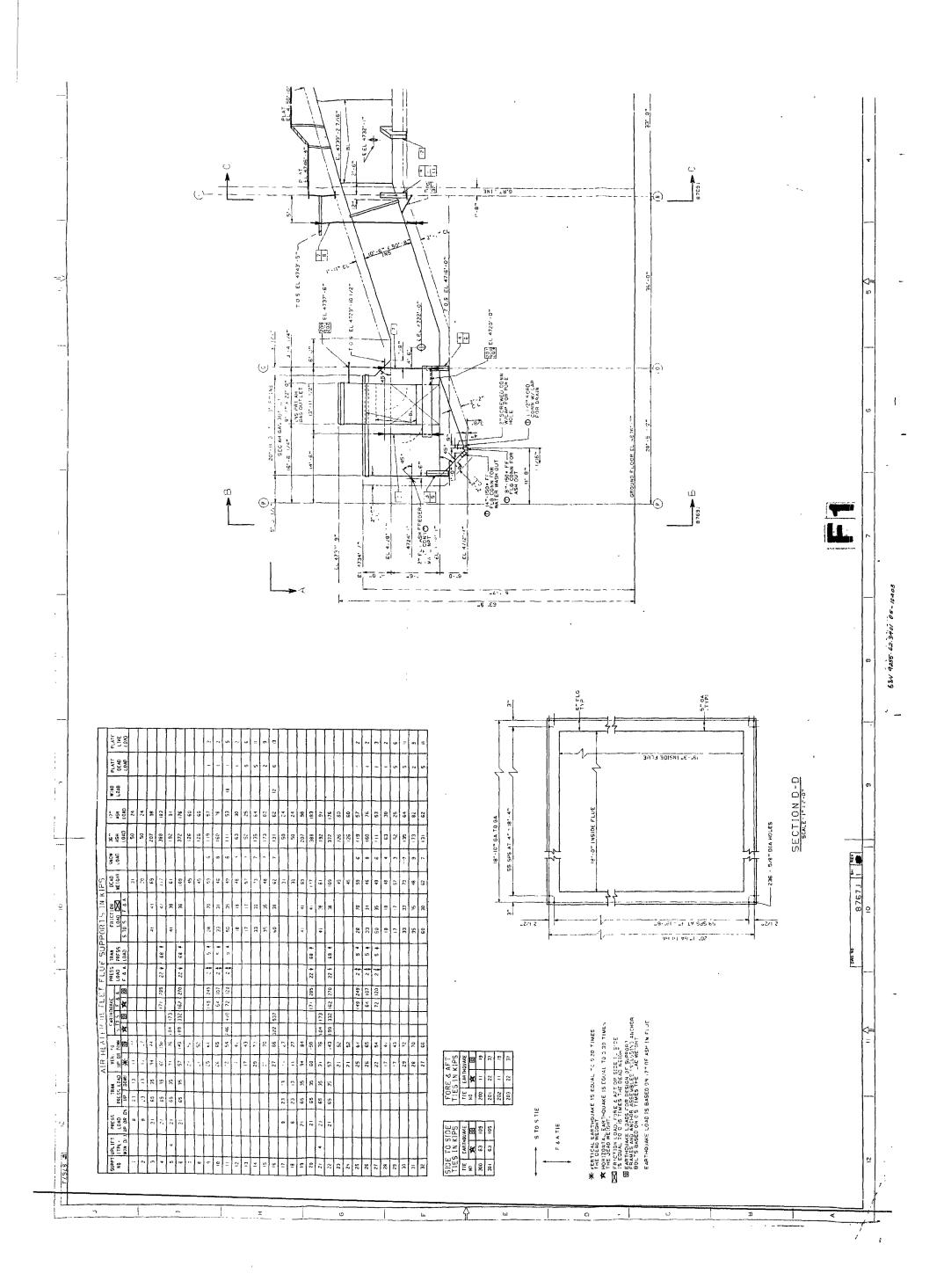


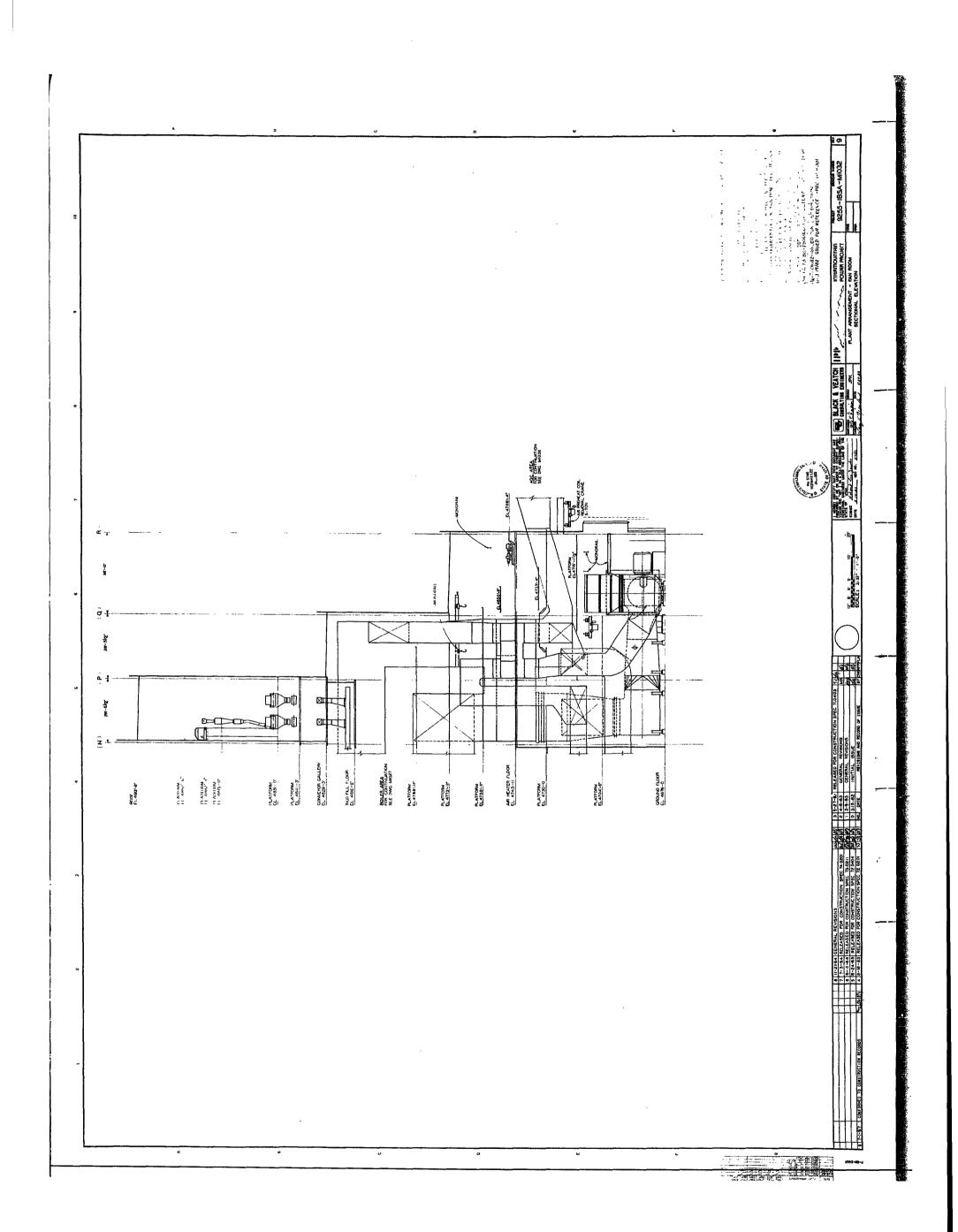






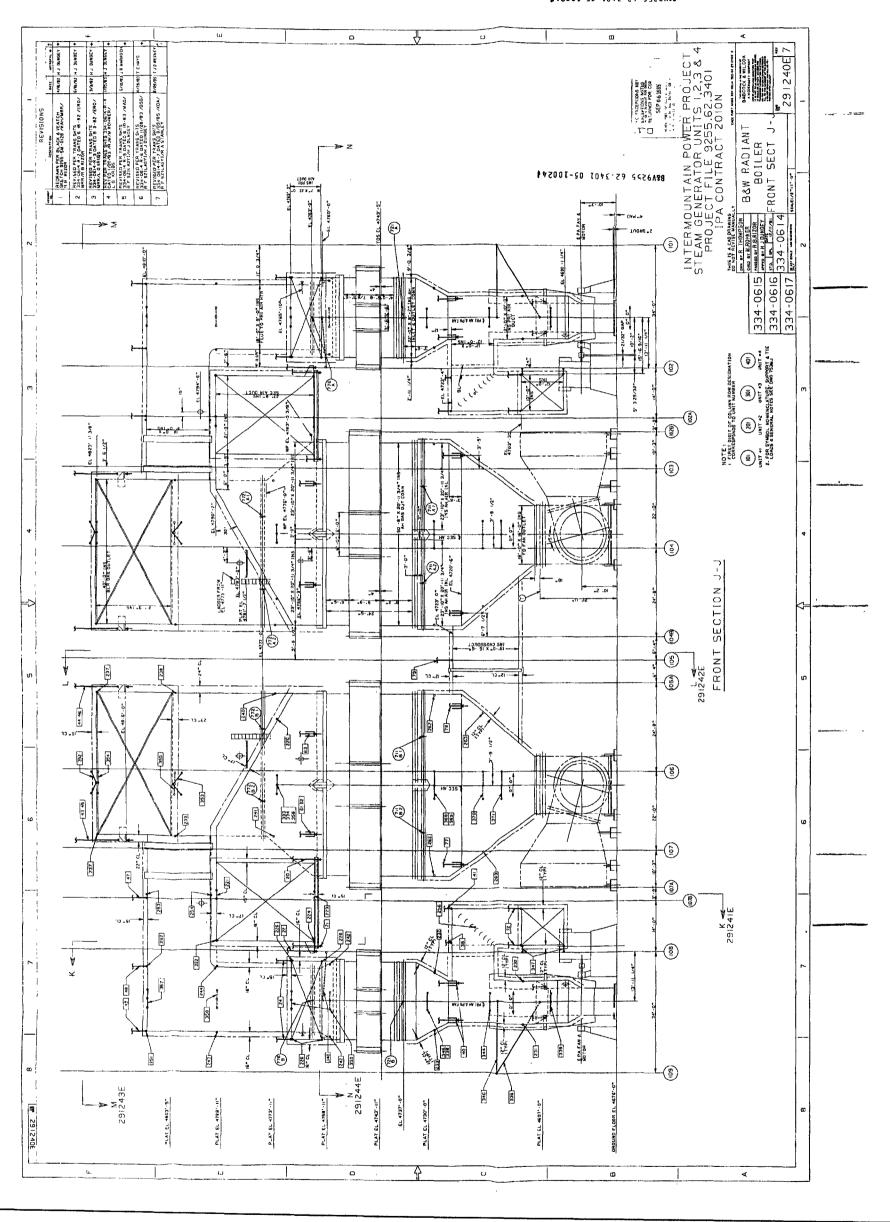


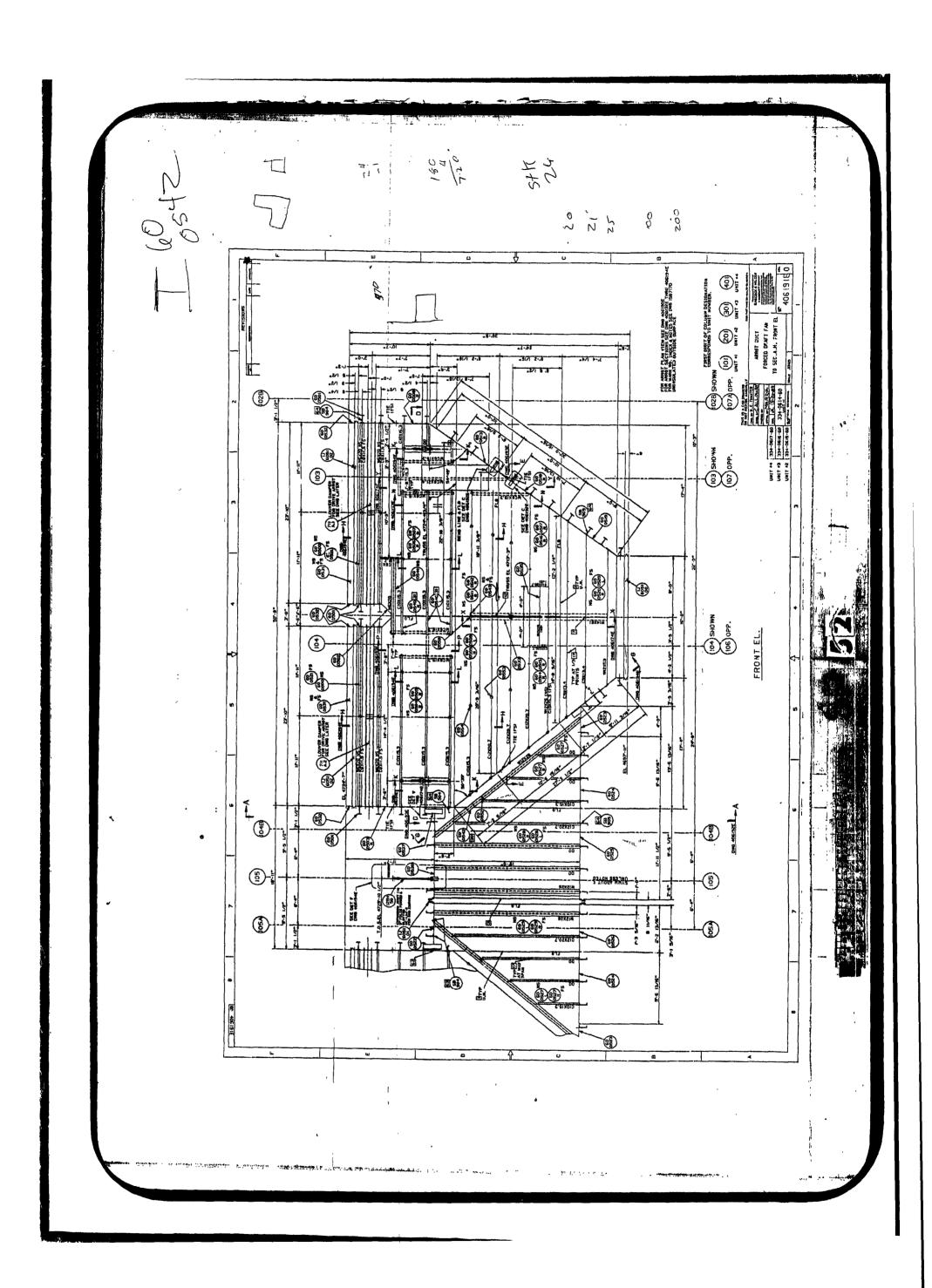


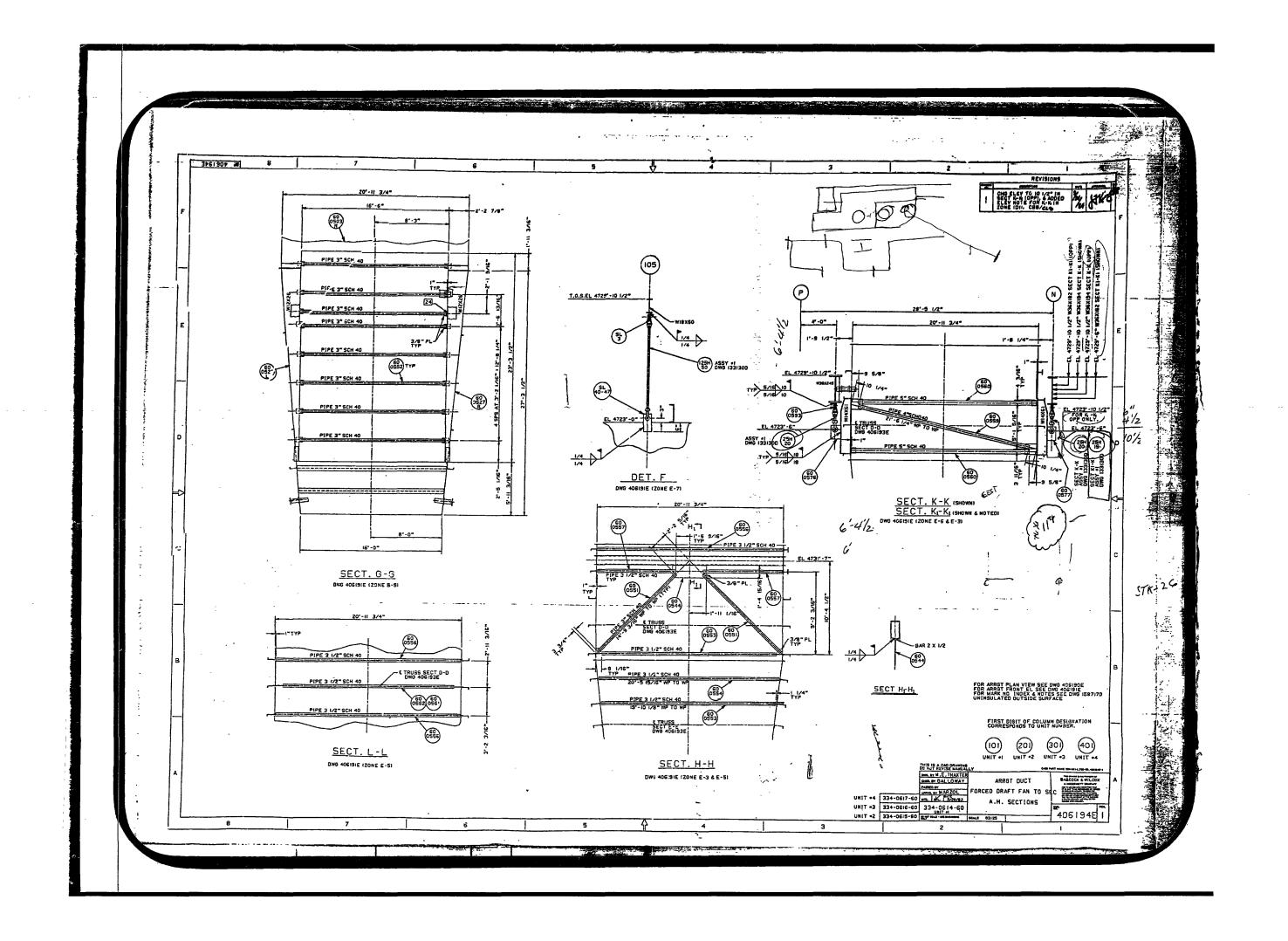


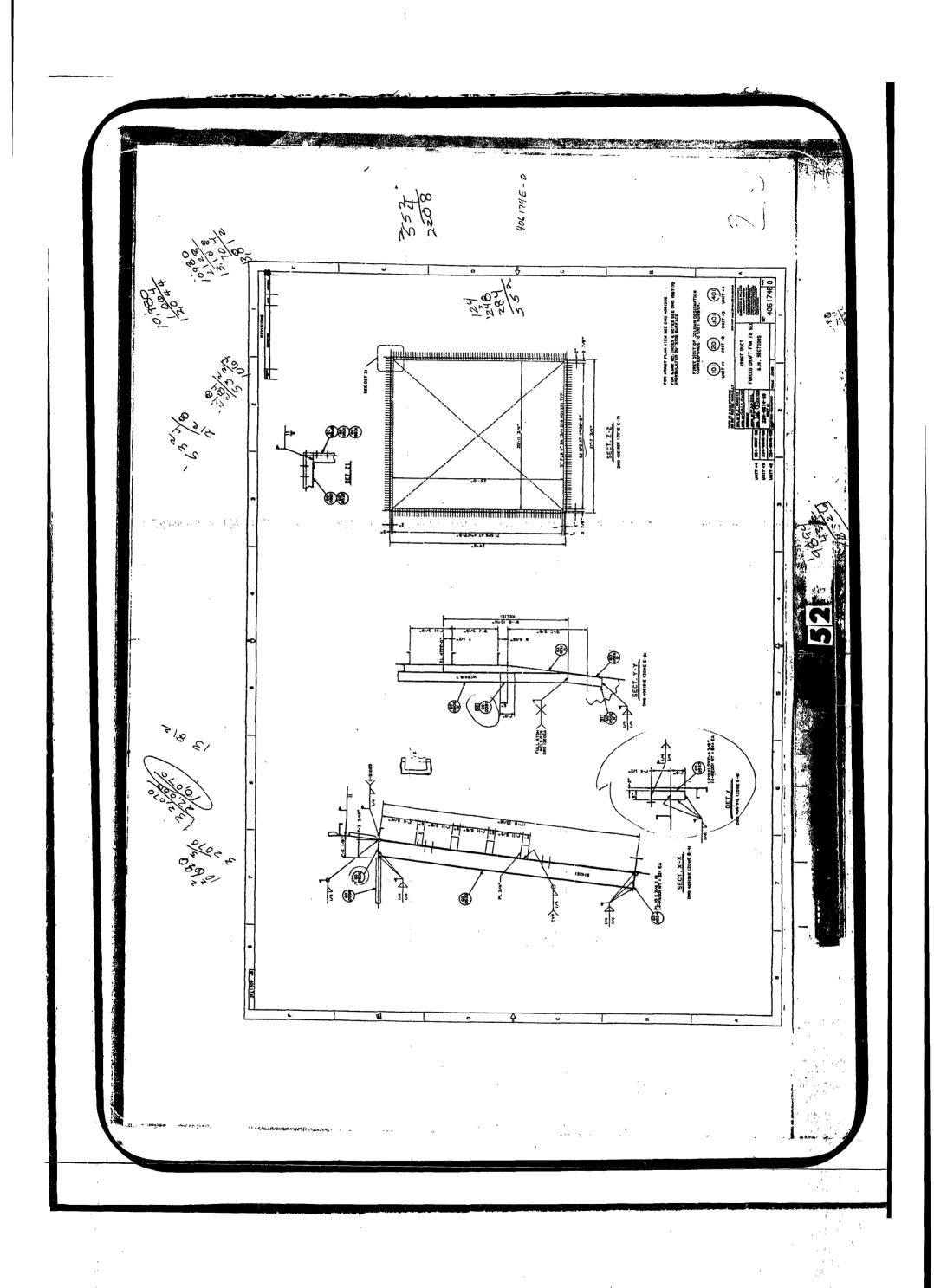
HEDRAWN PER BI ACK & VEATCH SKETCH 9255 SM 0178 /MAH/MRR/ R B RIZOR

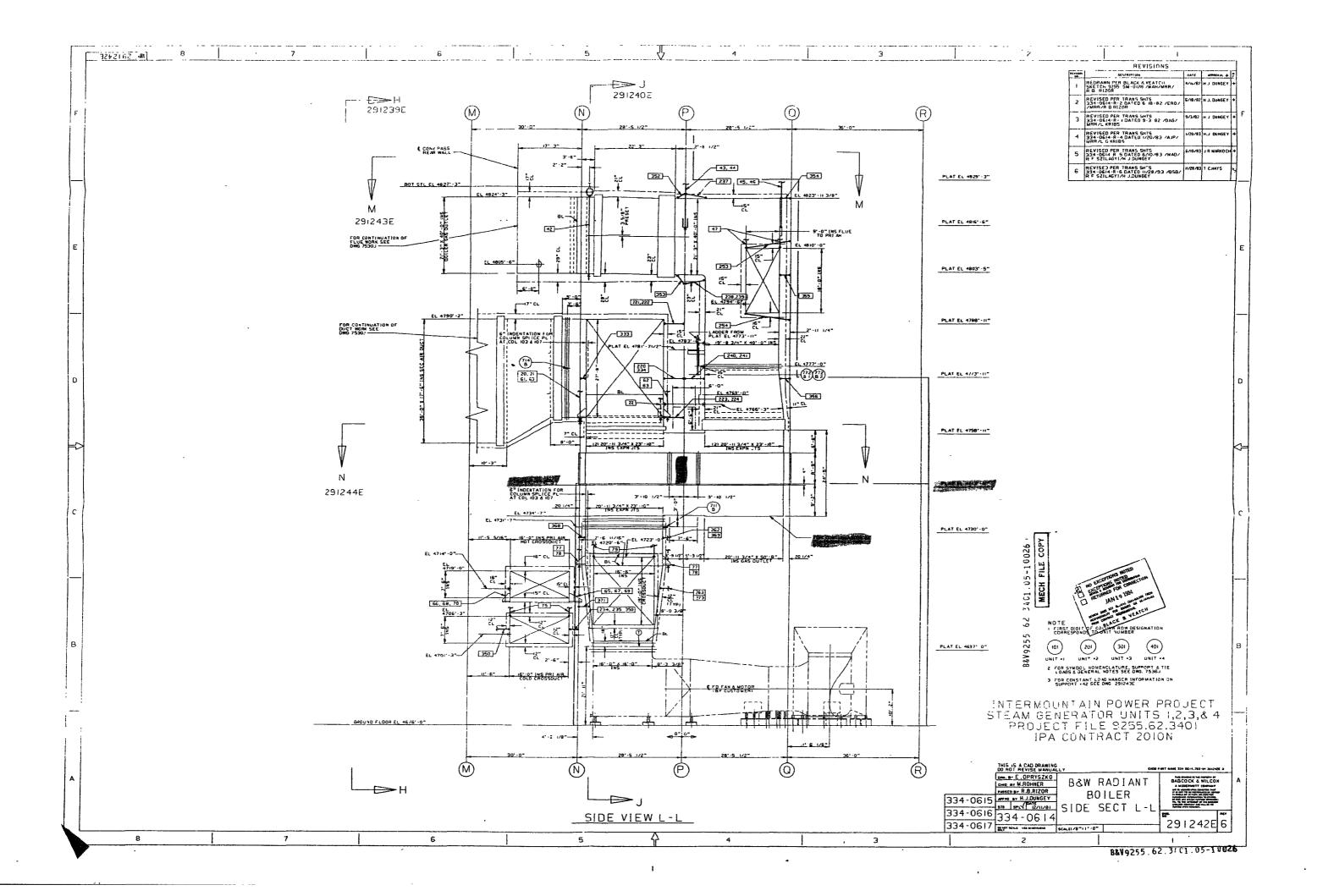
[32621x5 at 8 7







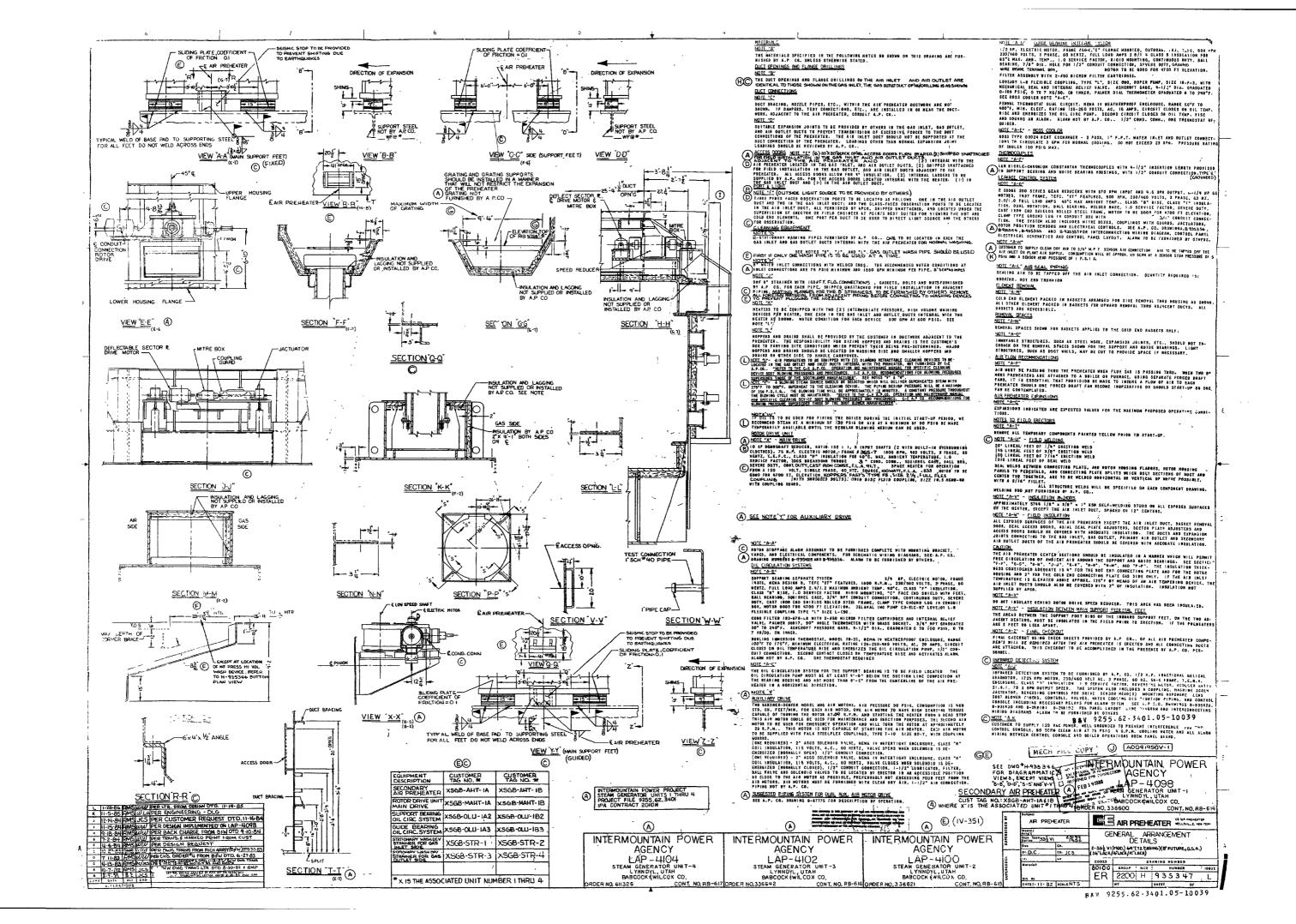


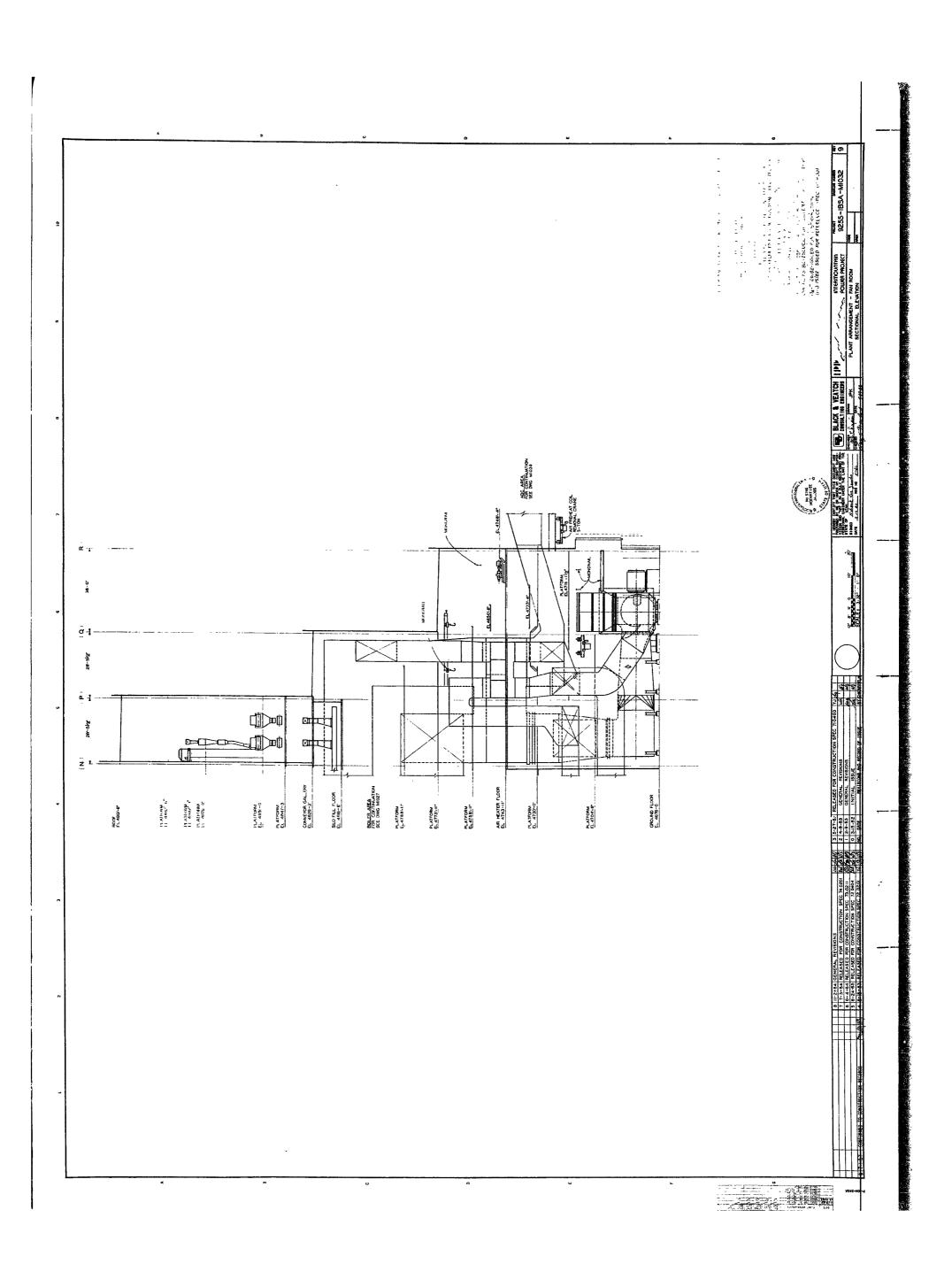


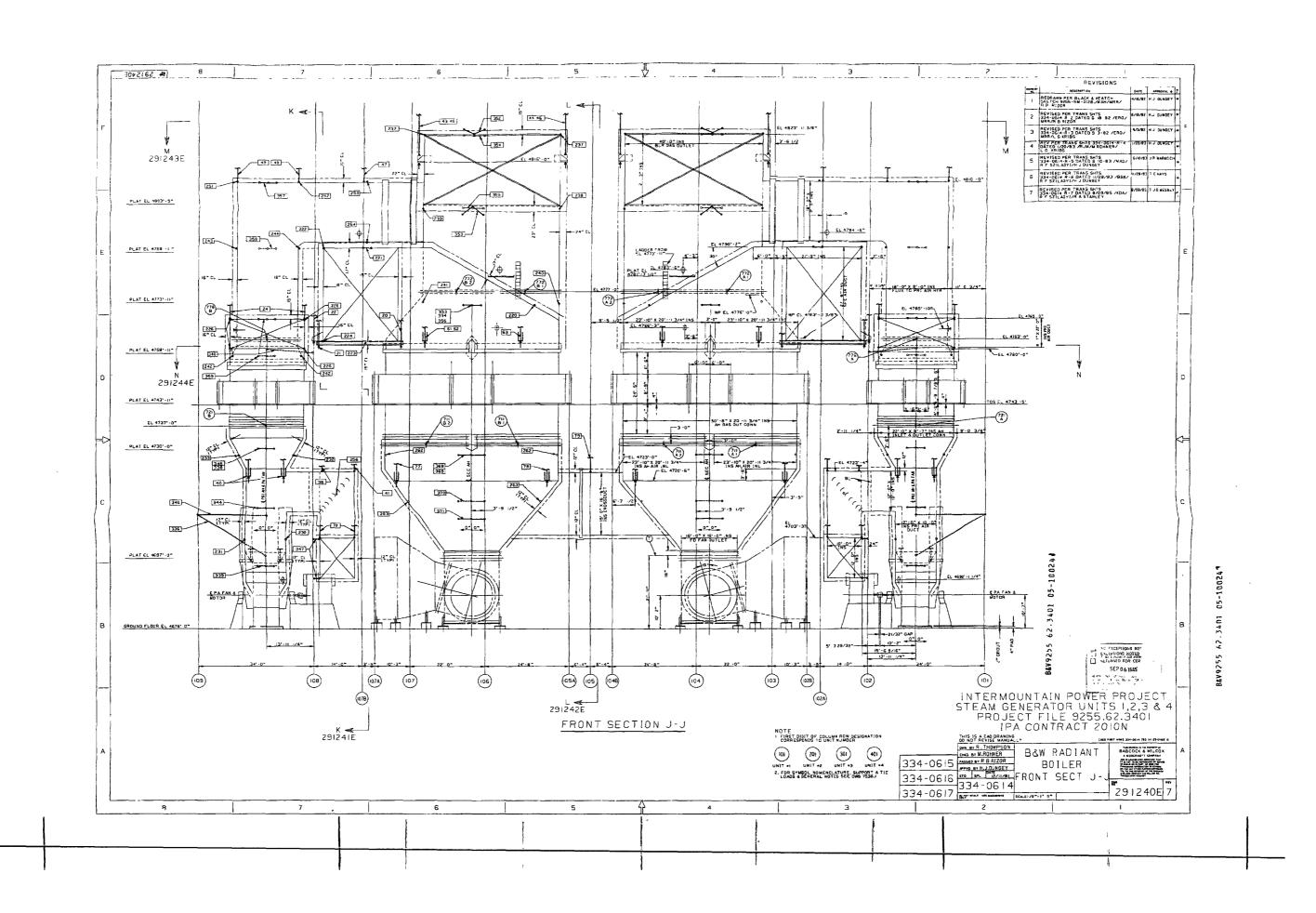
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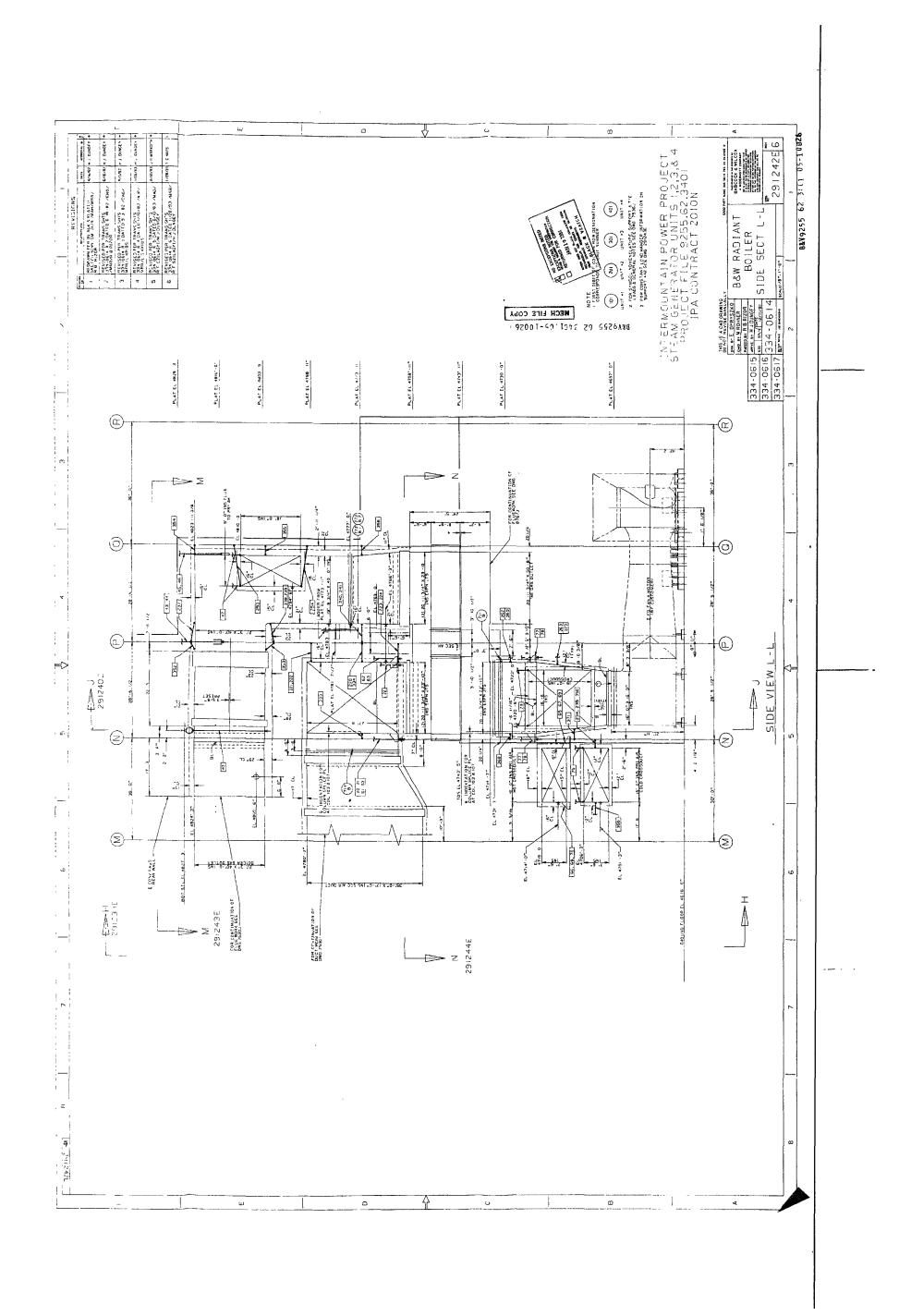
BOLER AREA FOR CONTINUATION SEE DING MICE? COMEYOR CALLERY EL. 4629-3 AR HEATER FLOOR EL 4743-II' SLD FILL FLOOP EL 4816-6 GROLAD FLOOP St. 4678-0 11 ANG 15 HATFORDE I. ARB." (* HAIPTORDE II ARTG-EF PLATFORM EL 483 - O PLATFORM EL 4841-3 PLATFORM EL 4730-0

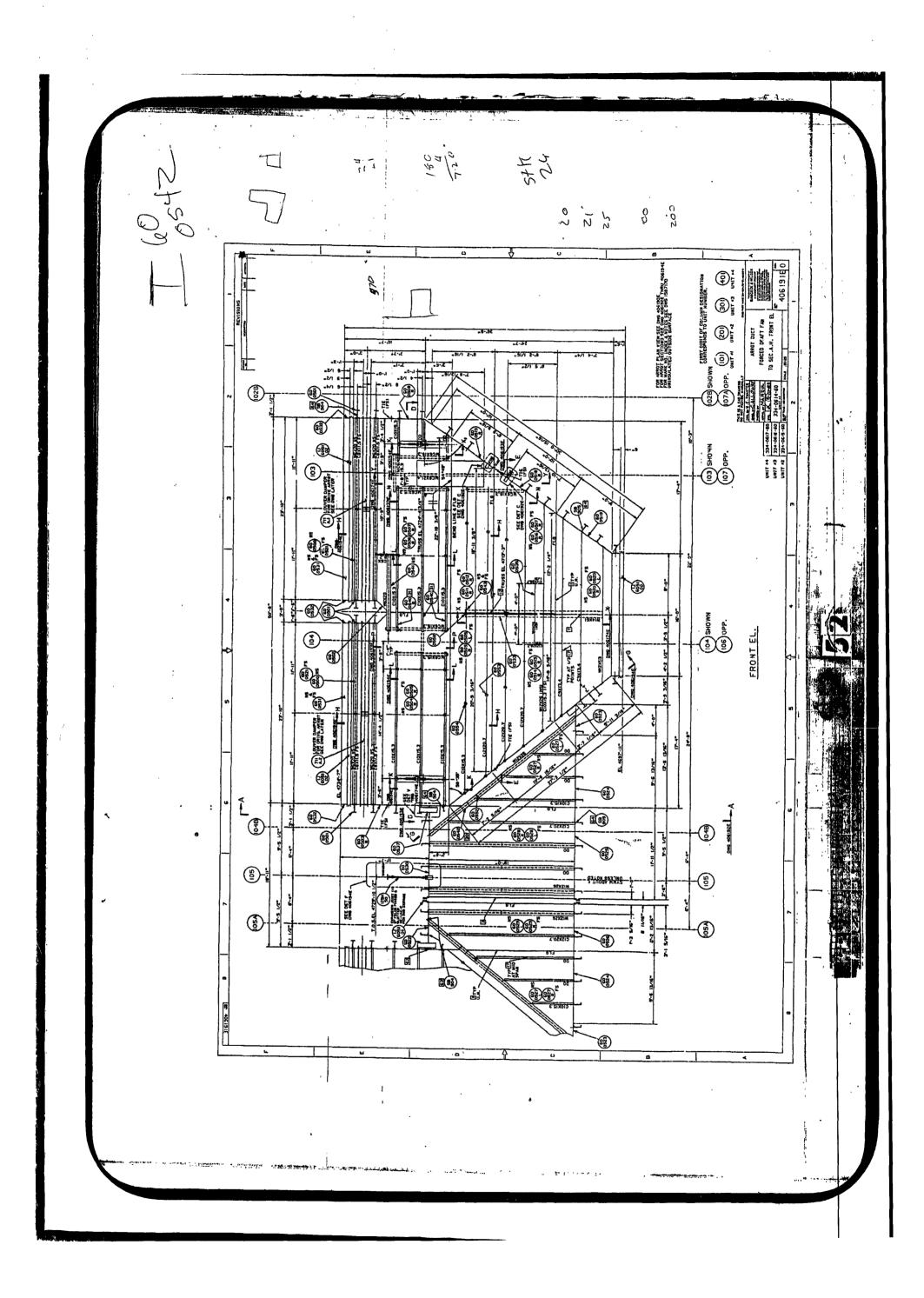


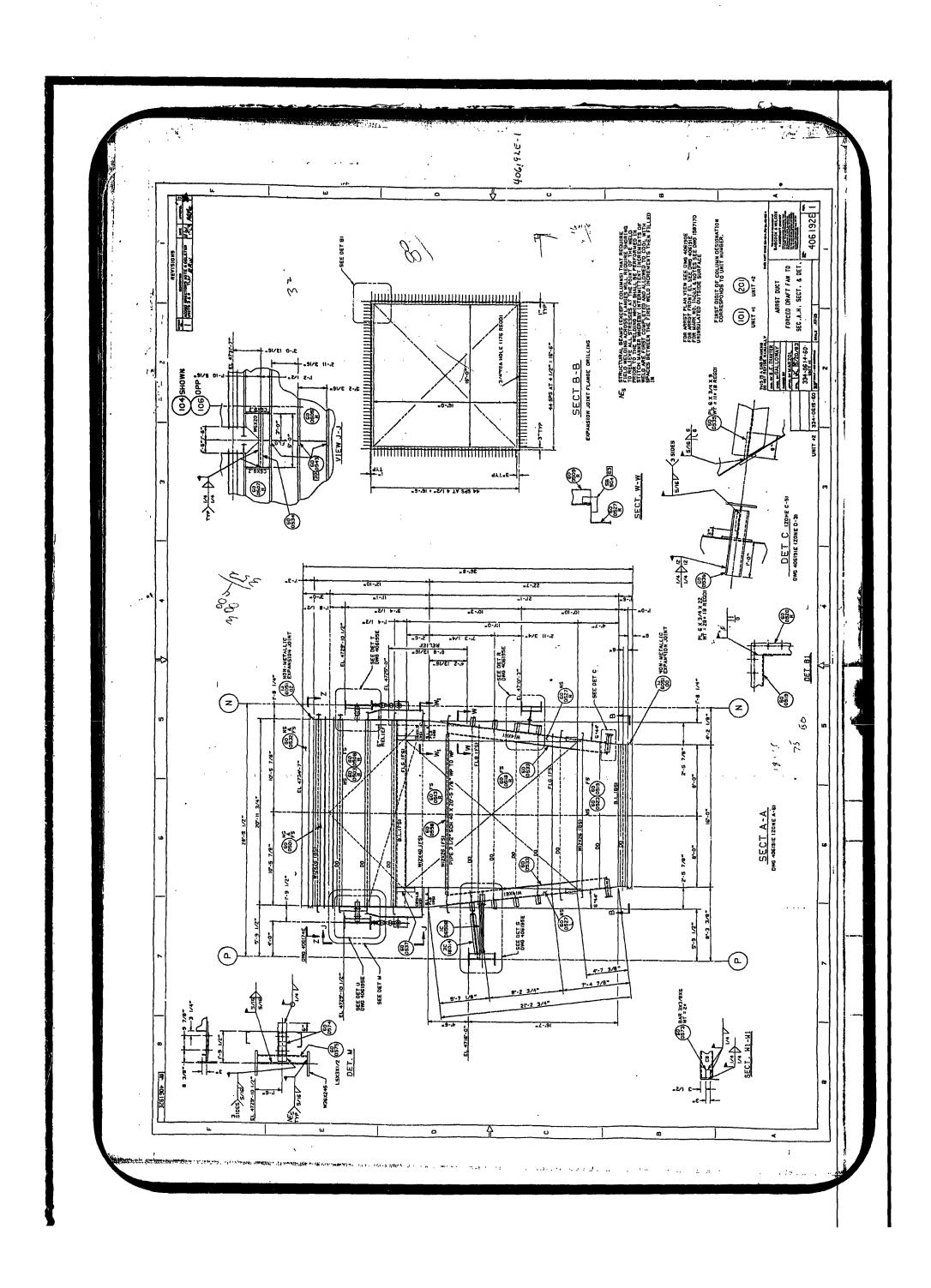


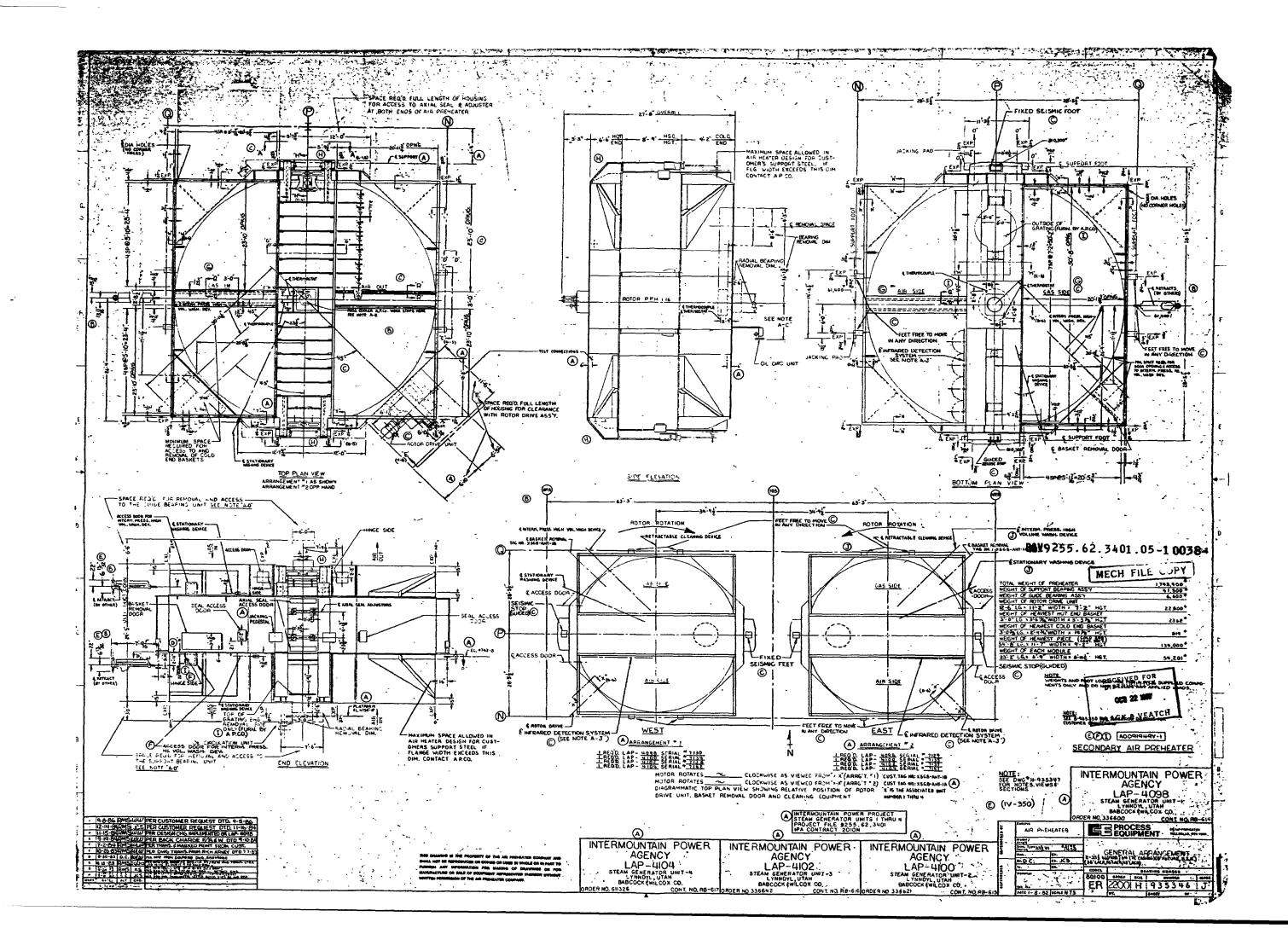


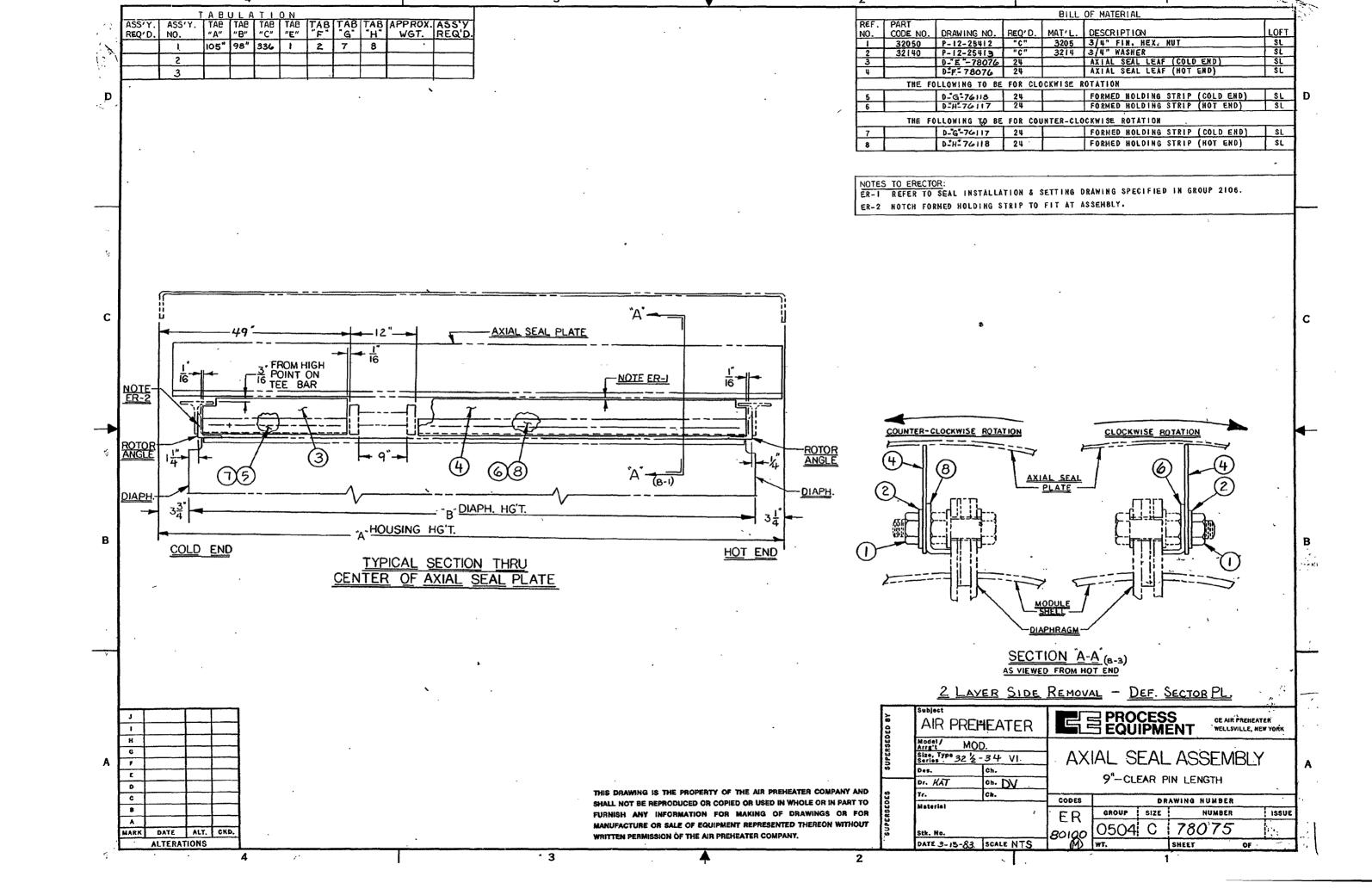




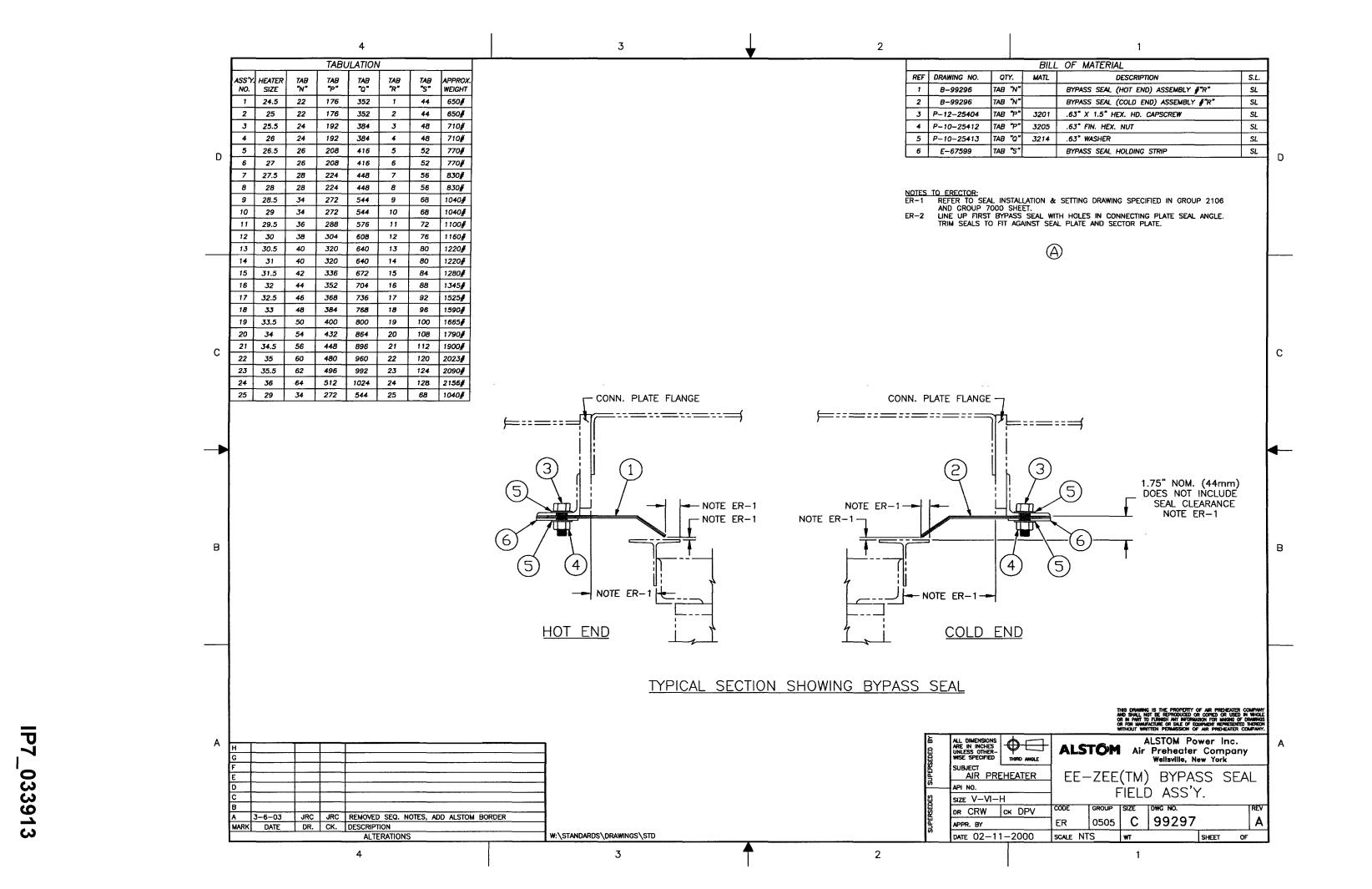


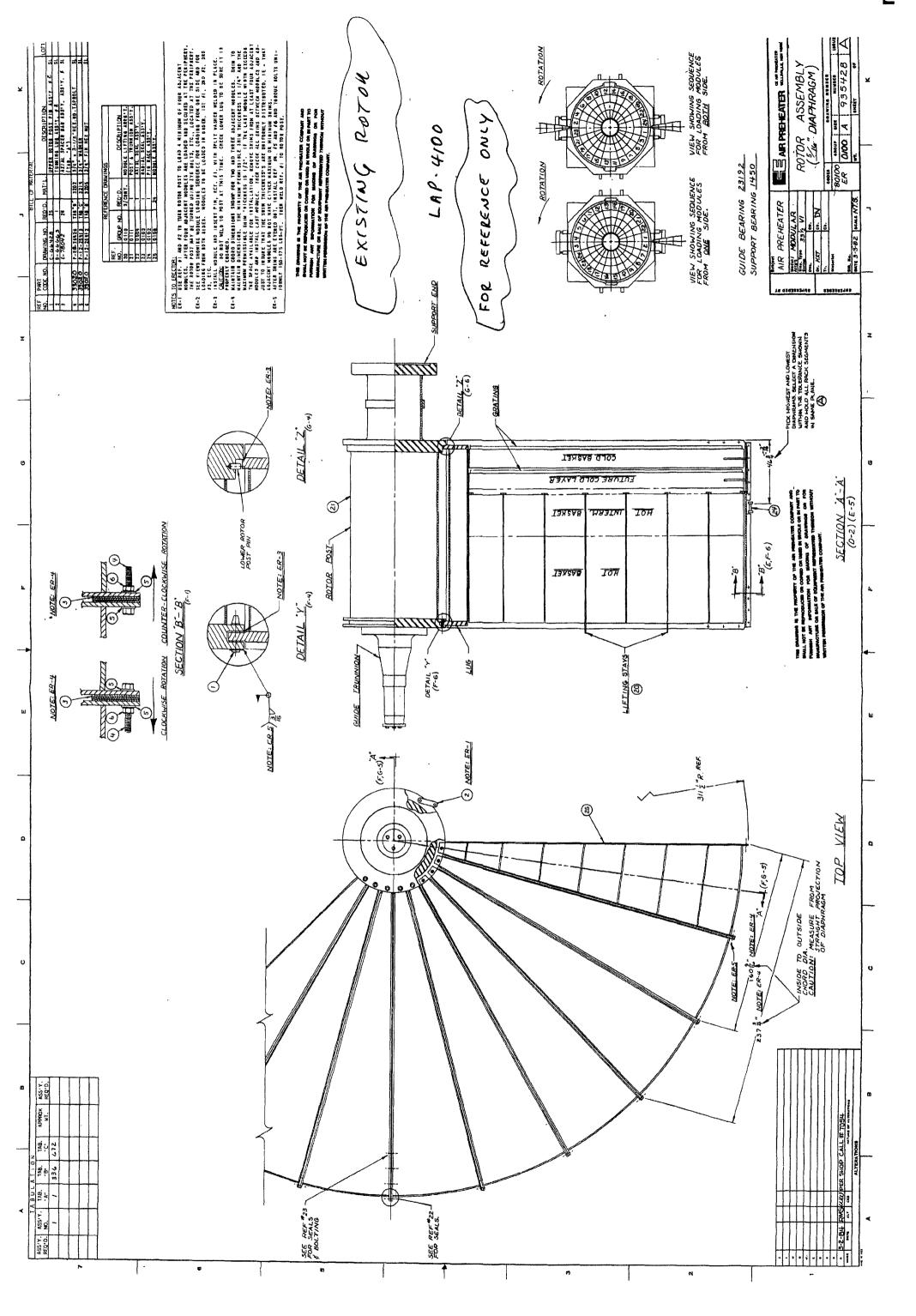






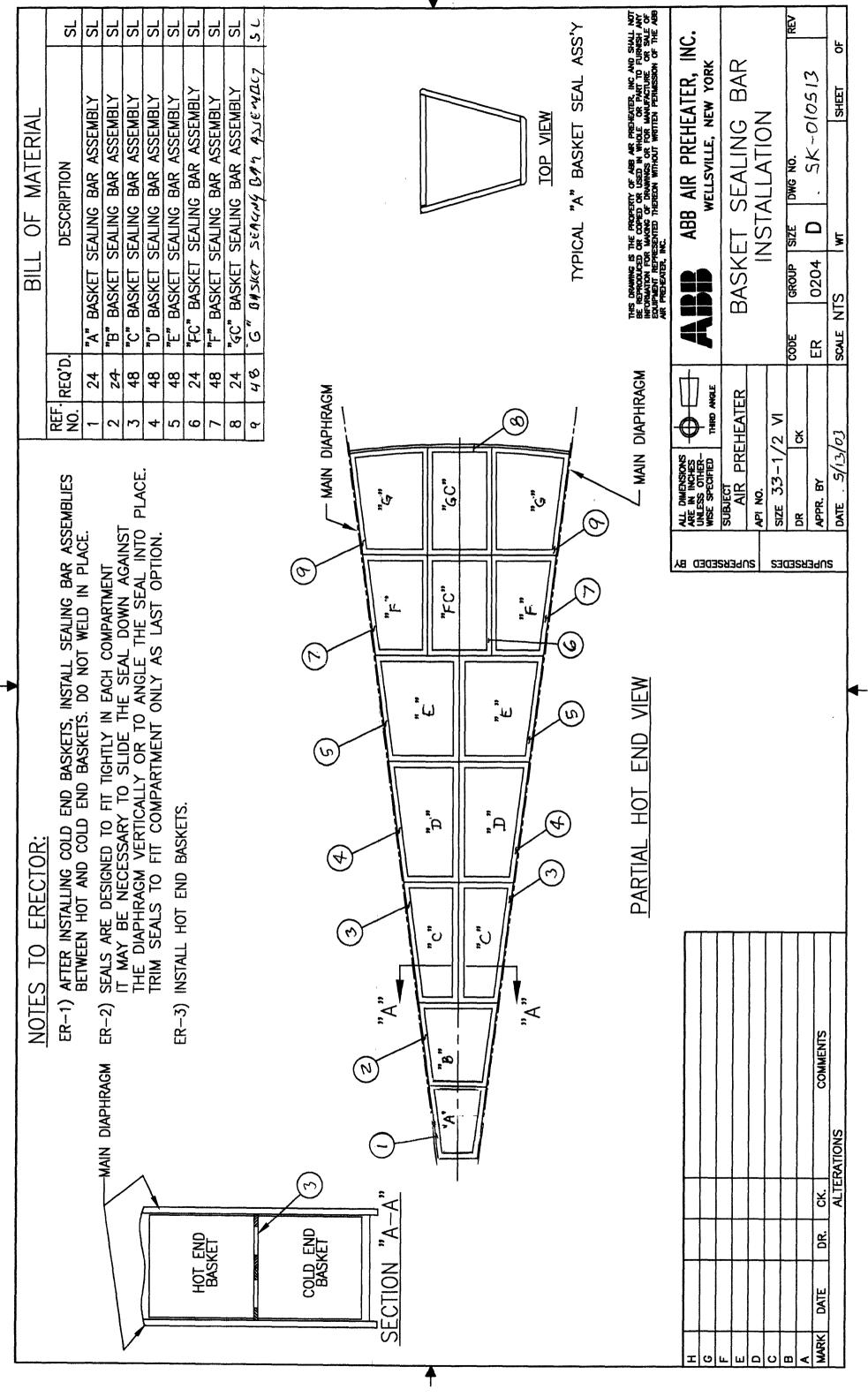
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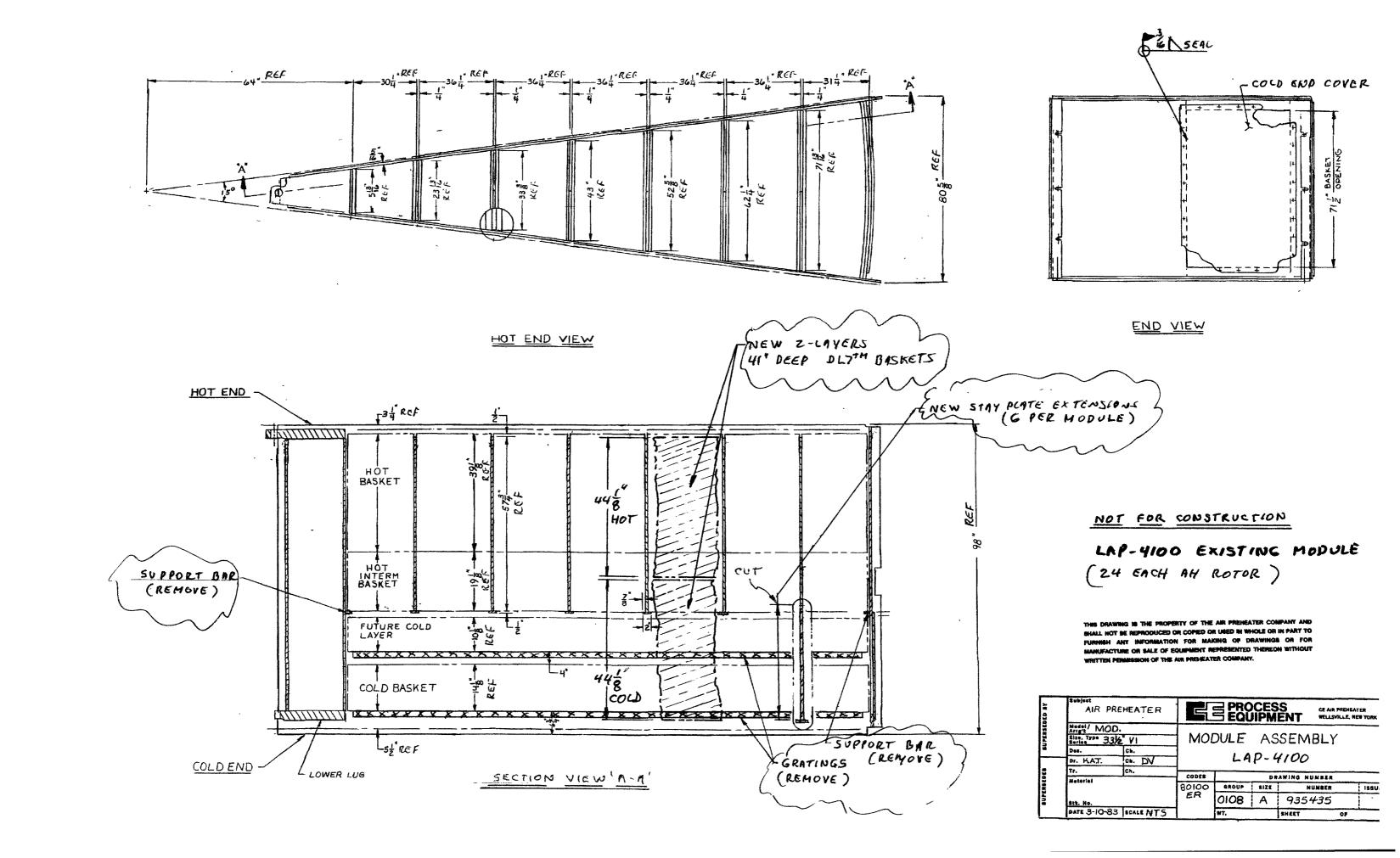


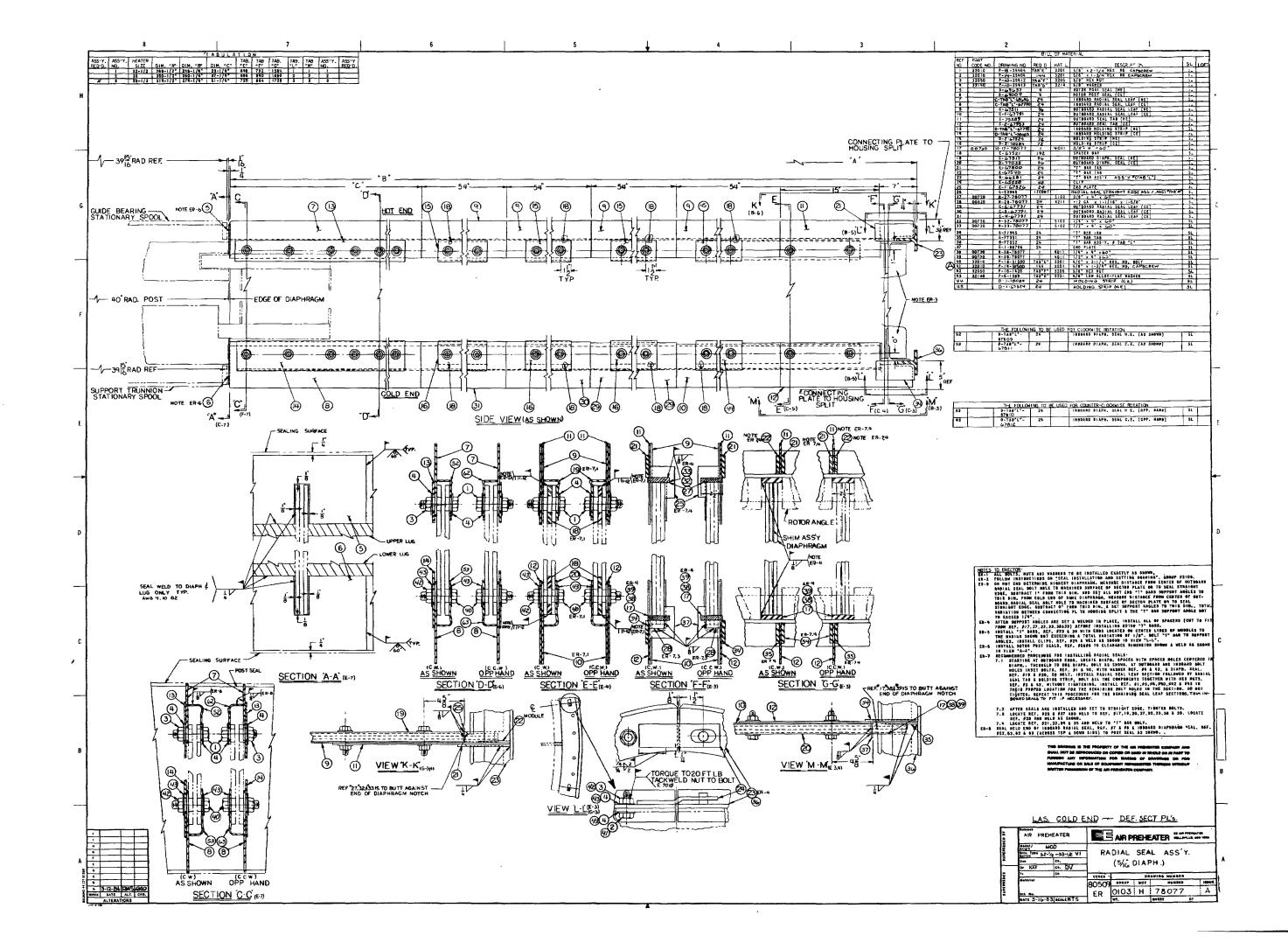


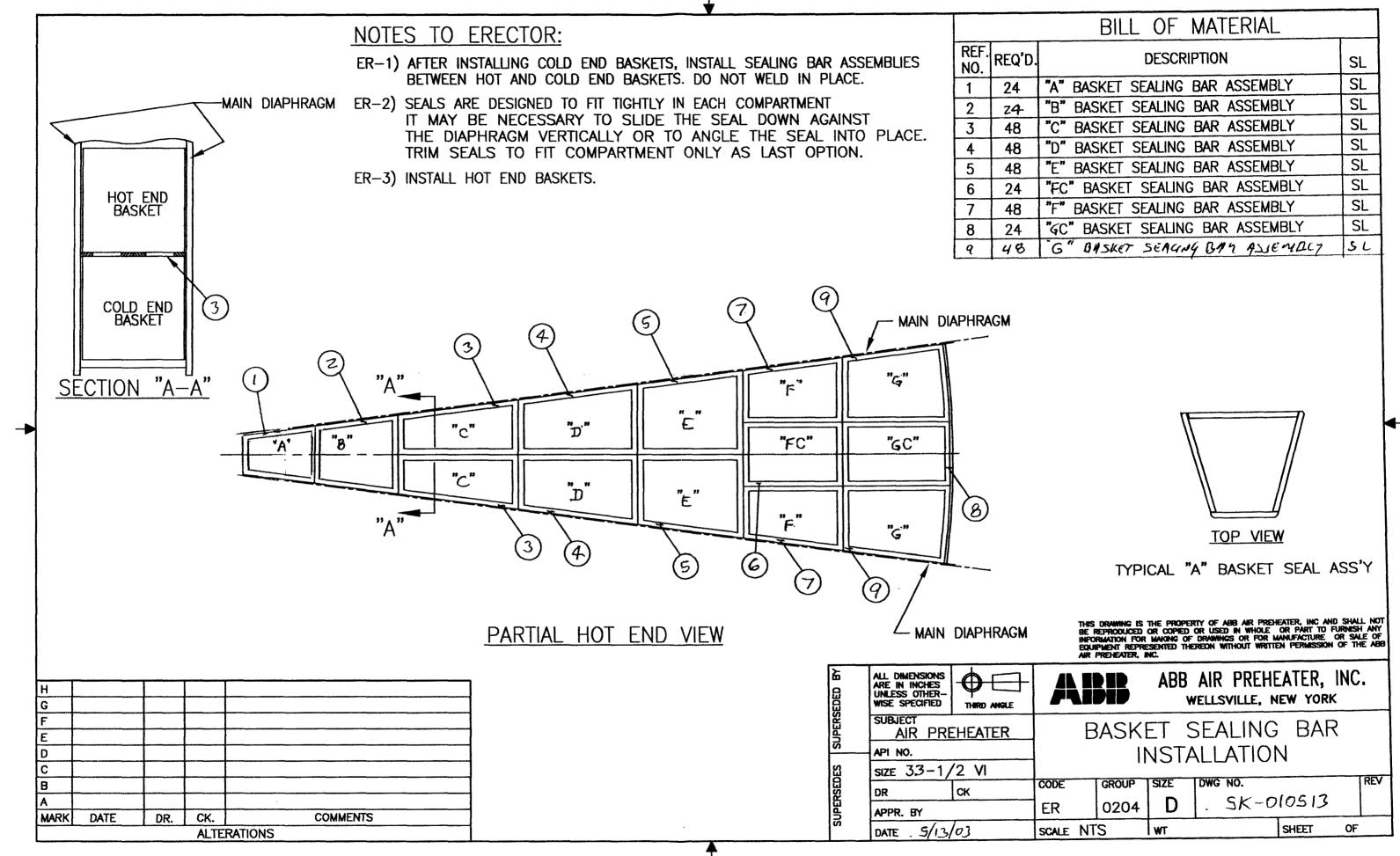
BILL OF MATERIA

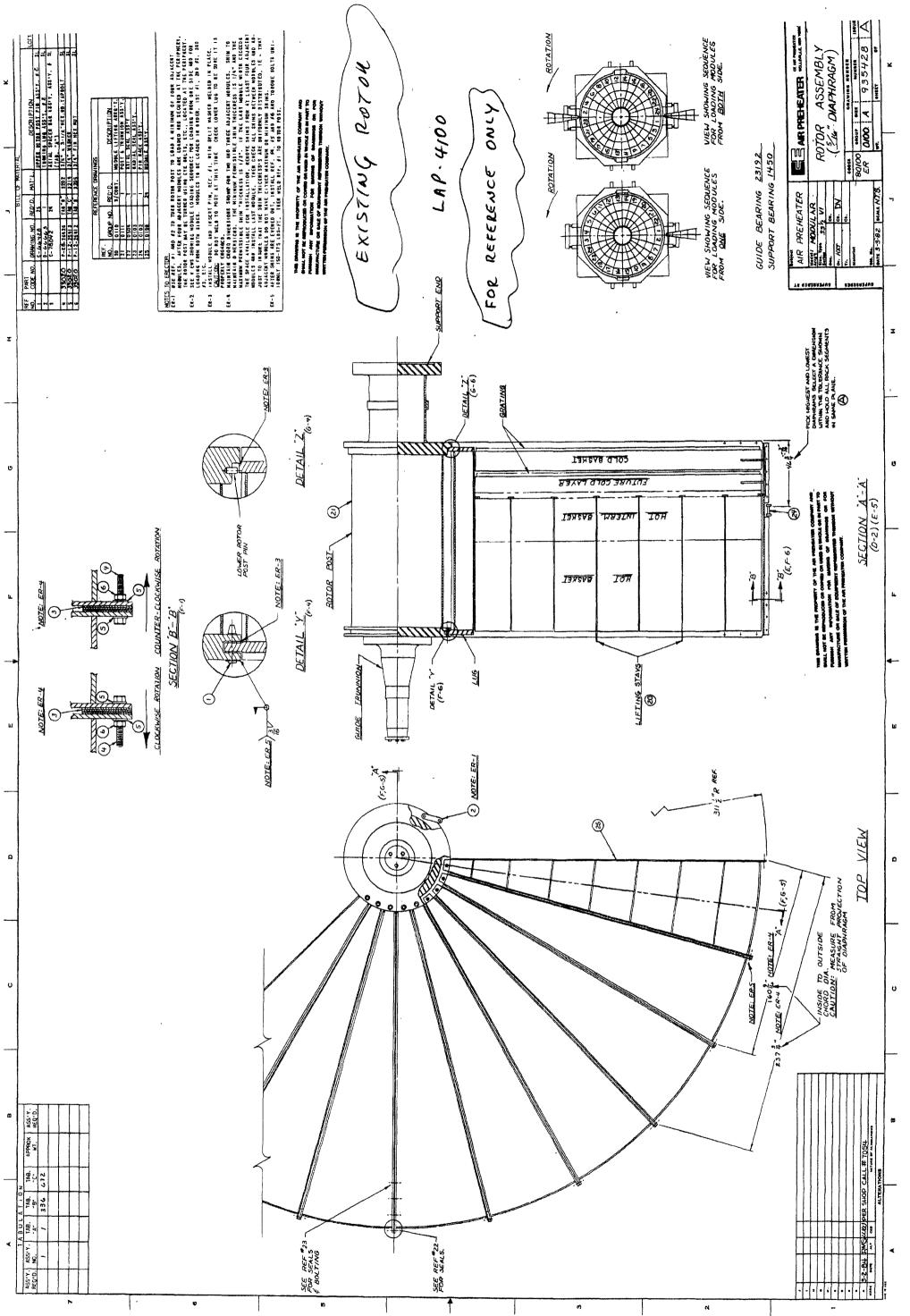
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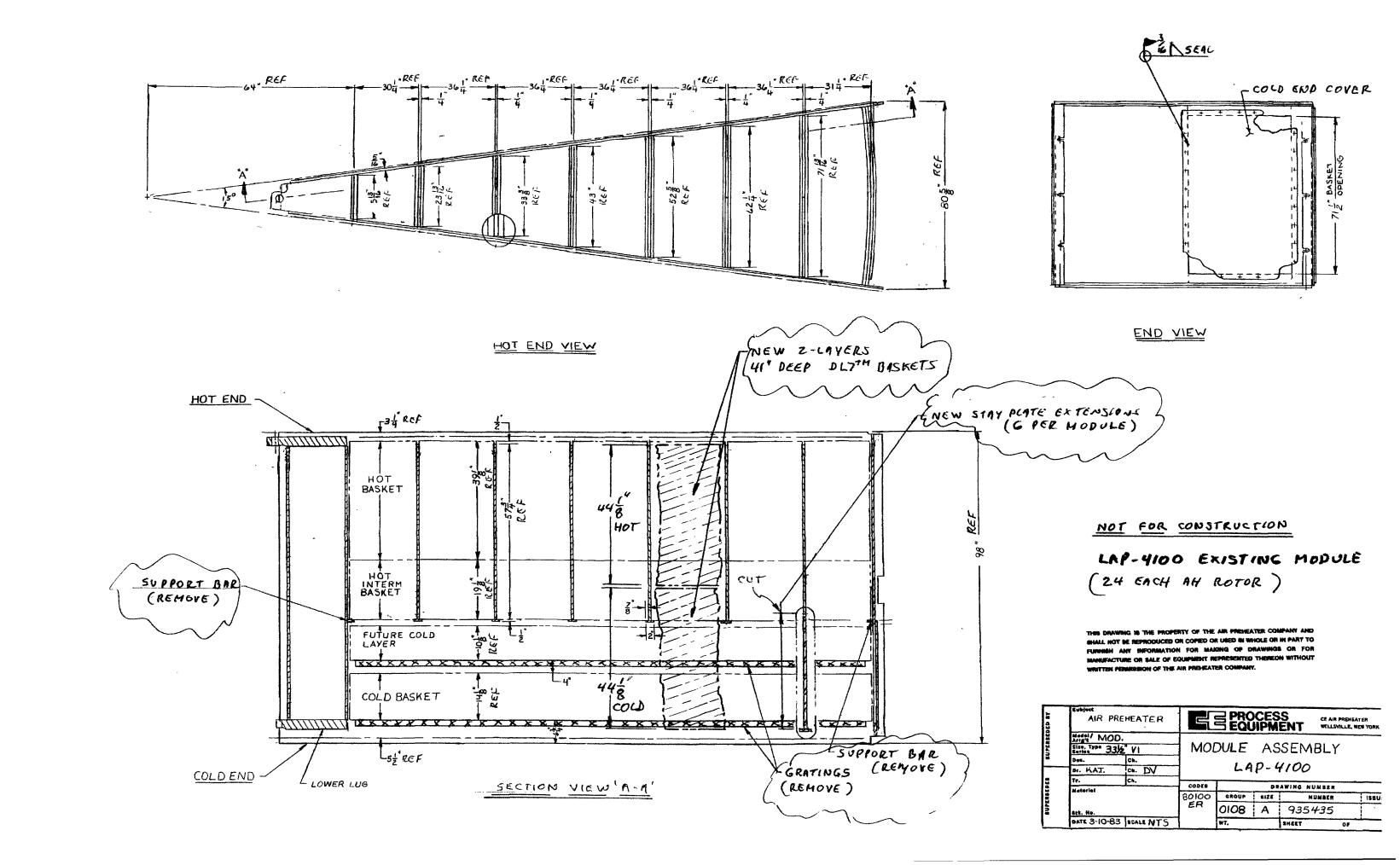


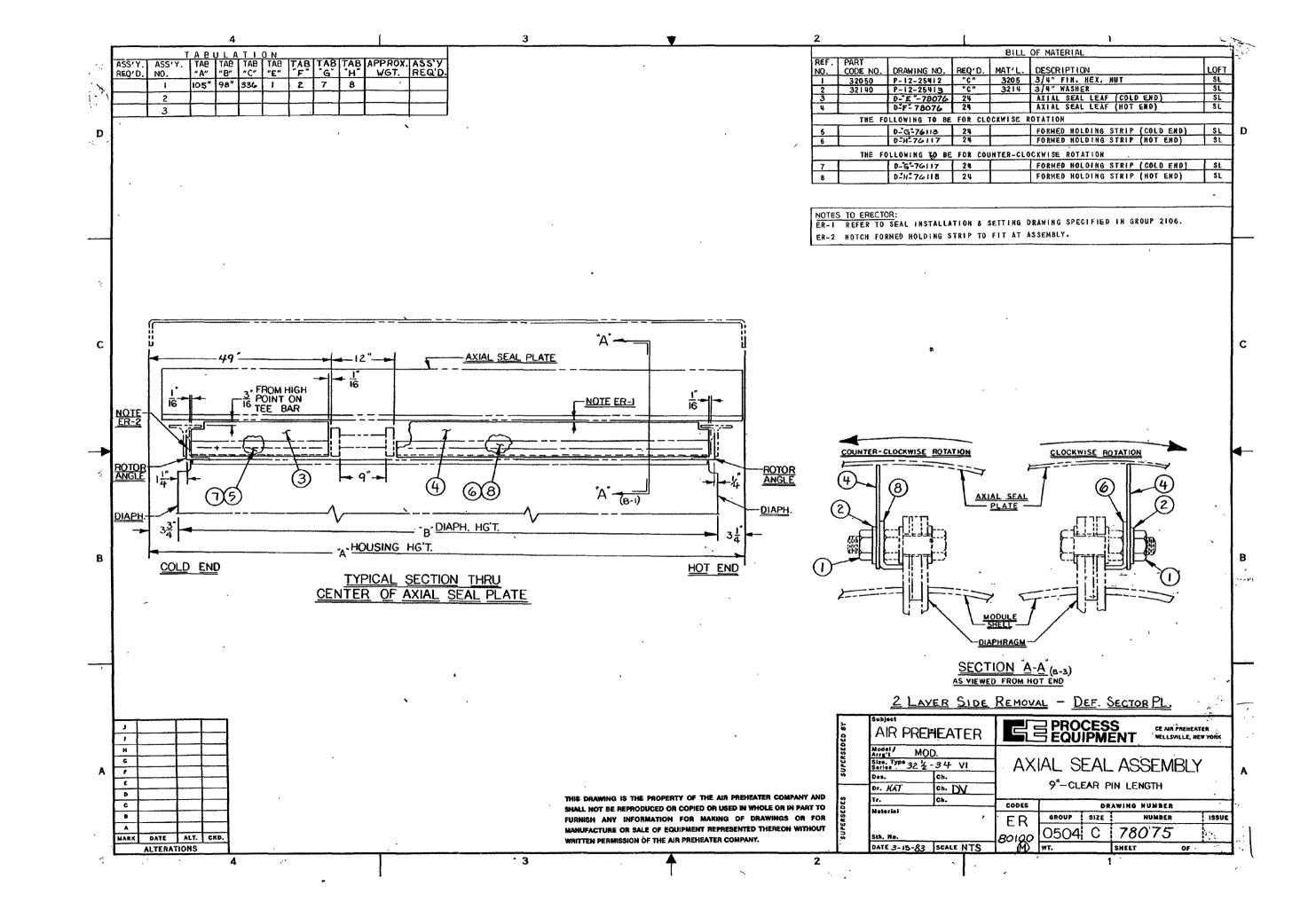


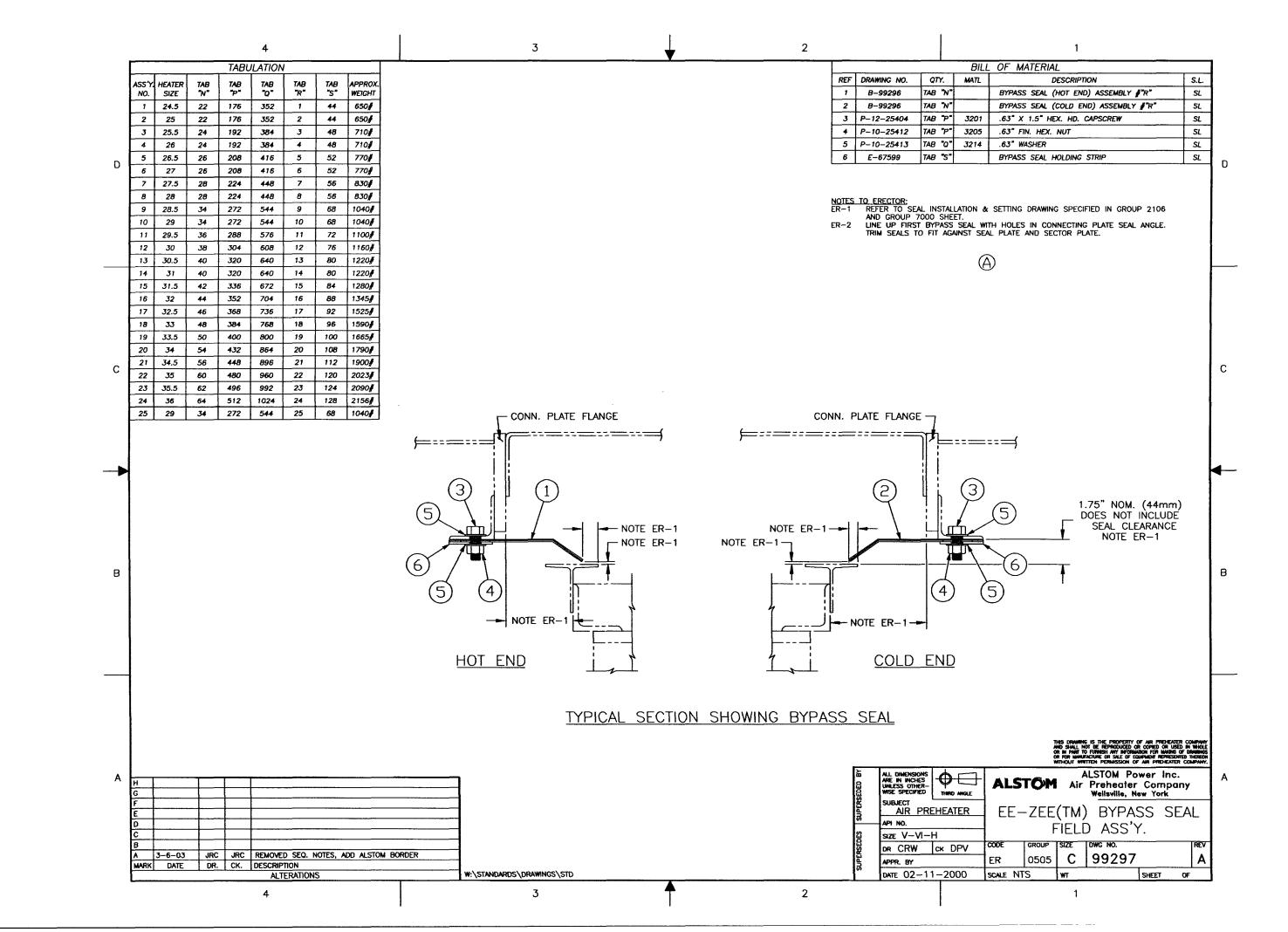












P7_033924

From: <guy.i.drake@power.alstom.com>
To: Bret Kent <Bret-K@ipsc.com>

Date: 11/12/2003 1:34 PM

Subject: Re: IPSC Lynndyl Unit #2 AH materials, LAP4100

CC: <gary.c.allen@power.alstom.com>

Bret.

L

Most of this information will be included on the new installation drawings. Also, this reference information was sent previously.

Disassembly:

- 1. Drawing 78077, Remove all radial seals, post seals, holding strips and fasteners. Retain diaphragm seals and part numbers 17, 18, 19, 20, 25, 26 (should have straight-edge stored somewhere),27, 28, 32, 33, 37, 38, 39, 52, 53, 62, 63. If you don't replace t-bars also keep 23, 24, 36 and fasteners for t-bars.
- 2. Drawing 78075, remove all parts itemized in bill of materials. All new parts furnished.
- 3. Drawing 99297, remove all parts shown in bill of materials. All new parts furnished.
- 4. Drawing 935435, individual rotor module (one of 24 per air preheater).

In each module you will remove hot, hot intermediate and cold end baskets. There are 11 hot end baskets, 11 hot intermediate baskets and 14 cold end baskets in each module (x24). Baskets should be removed and loaded according to the sequence shown on drawing 935428. Once the baskets are removed you will cut each stay plate off (plates between diaphragms), six each module and remove support bars, one at inboard and one outboard per module. You will remove the cold end gratings (support bars under the cold side baskets) two layers in each module. Seal weld 24 existing cold end covers to rotor shell per air preheater.

Assembly:

- 1. Drawing SKETCH 'Rotor Modifications', install all parts as shown in bill of materials and drawing.
- 2. Load cold end baskets, 14 per module and install sealing bars drawing SK-010513. Load hot end baskets, 14 per module. Load modules according to sequence shown on drawing 935428.
- 3. Install new radial, post, bypass and axial seals per drawings 78077, 99297, 78075.
- 4. Set seal gaps according to seal settings sheet with help of radial and axial seal straight-edges, hopefully still on site.

If you still have questions you may want to contact Harlan Finnemore. He's worked on several of these. Thanks.

Guy Drake



Bret Kent <Bret-K@ipsc.com>

11/12/2003 09:55 AM

To: Guy I. Drake/USWEL01/Power/ALSTOM@GA cc: Gary C Allen/USWEL01/Power/ALSTOM@GA Subject: Re: IPSC Lynndyl Unit #2 AH materials

Security Level:? Internal

Guy,

We are finding more question that come up with regard to the scope of work. Do you have a manual or writeup that would cover the following:

- Step by step. What gets torn out.
- How many baskets can be removed on a side before uneven loading is a concern?

- What items that are torn out need to be put back in. This will help us determine how careful to be, what materials we should have onsite to make repairs to these items...
- Other materials that would be beneficial in describing the scope of work to management.

Thanks for your help,

Bret Kent Intermountain Power Service Corp 850 West Brush Wellman Rd Delta, UT 84624

ph. (435) 864-6447
fx. (435) 864-0747
bret-k@ipsc.com
http://www.intermountainpower.com/

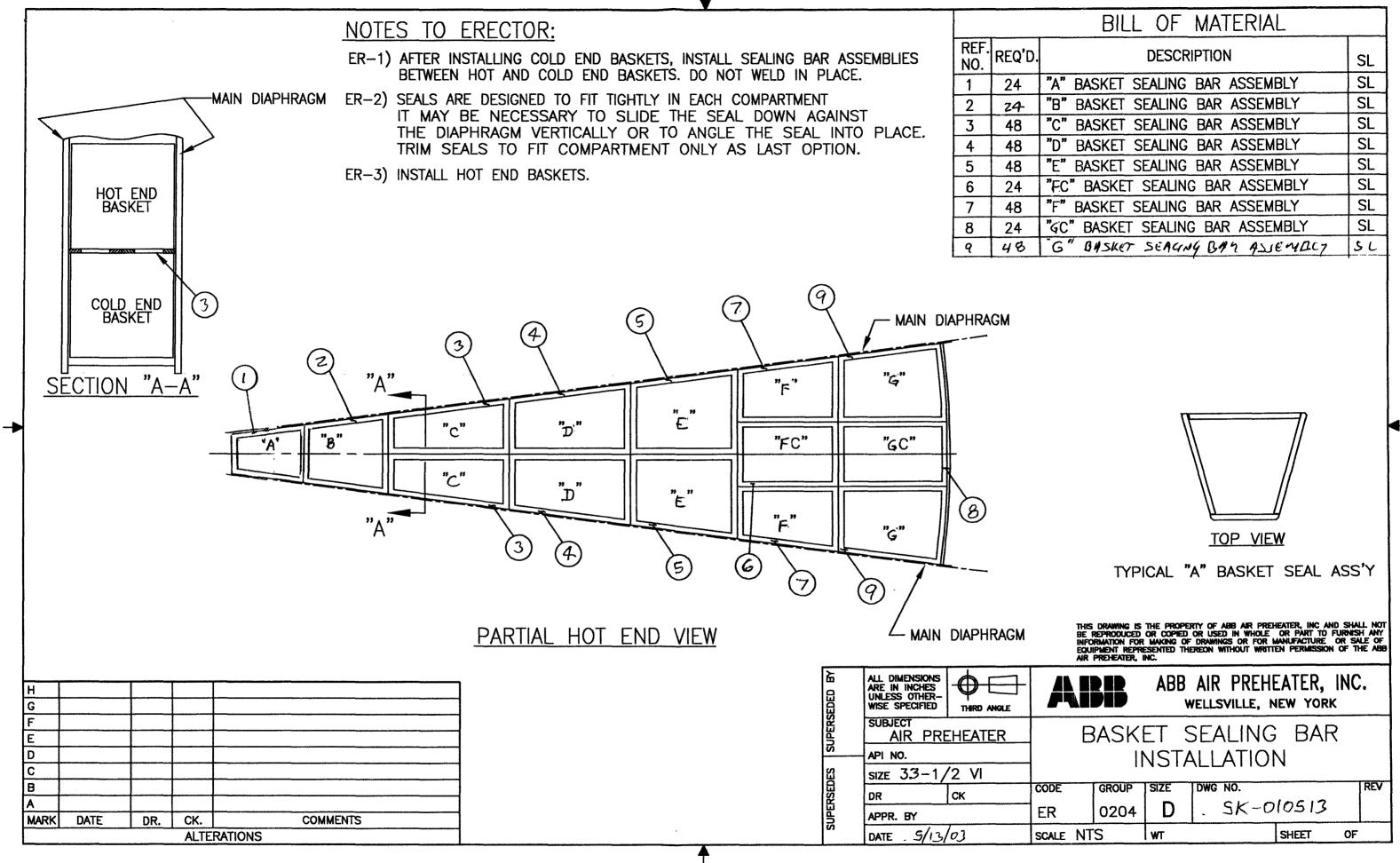
>>> <guy.i.drake@power.alstom.com> 11/12/2003 7:36:23 AM >>>

Bret,

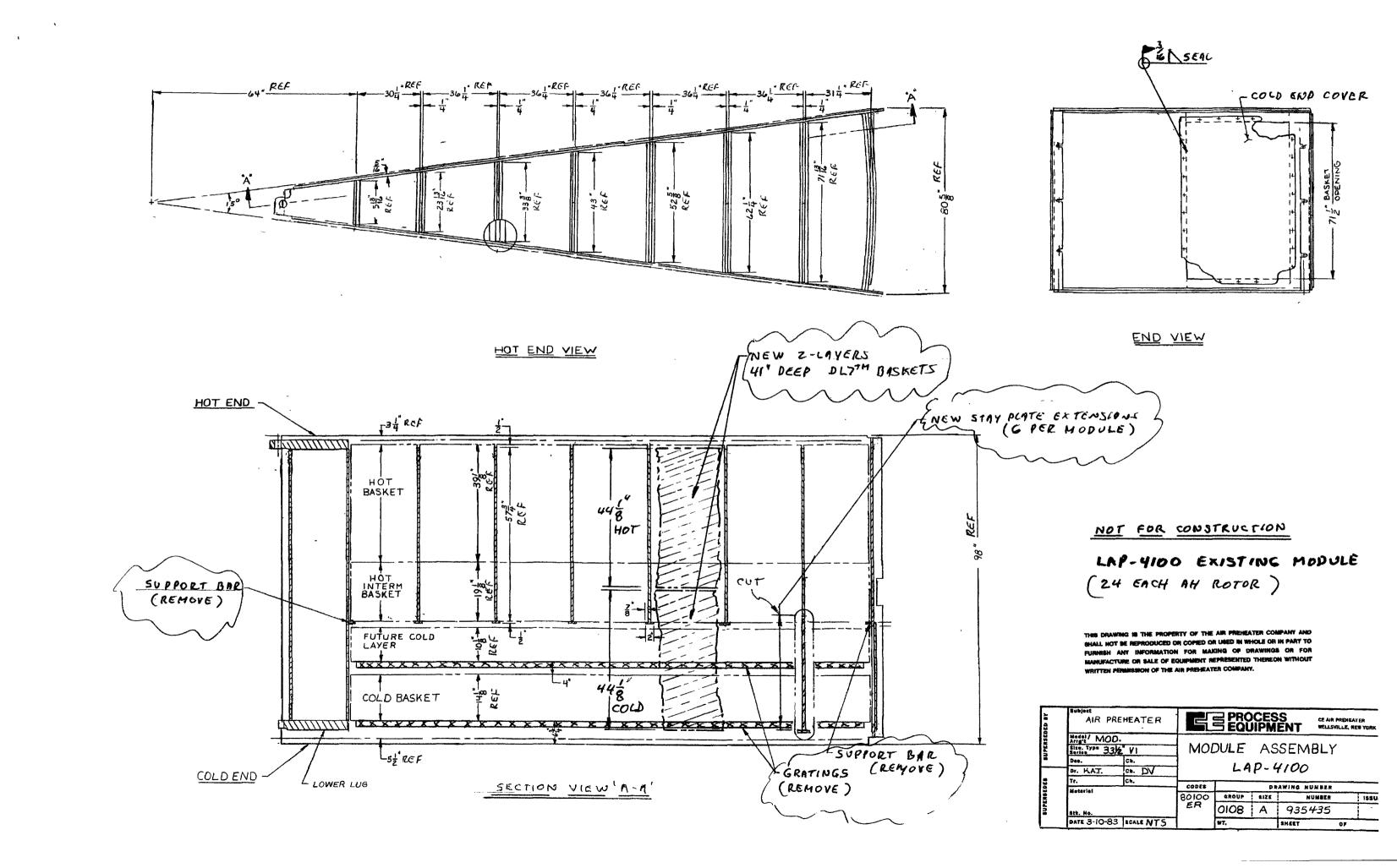
Rotor angle is attached to the periphery of the rotor shell, hot and cold ends. The t-bars then bolt to the rotor angles. If the rotor angles are in good condition then replacement is not needed. See attached sketch, section B-B, item #1 is t-bar that gets bolted to the rotor angle, hot and cold ends. Hope this helps.

Guy Drake









NOTE: ER-4

(3)

NOTE: ER-4

(3)

T A B U L A T 1 O N

ASS'Y. ASS'Y. TAB. TAB. TAB. REQ'D. NO. "A" "B" "C"

1 336 672

RAWING NO. REO'D. MAT'L

DESCRIPTION
UPPER NOTOR POST PIR ASS'Y. # 2

TURNING LUG ASS'Y, # Z AXIAL SPACEN BAN ASS'Y, ASS'Y, #

